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Experimental Study of a Generic High Speed Civil Transport - Tabulated Data

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Summary

An experimental study of a generic high-speed civil transport has been conducted in NASA Langley's 8-Foot Transonic Pressure Tunnel. The data base was obtained for the purpose of assessing the accuracy of various levels of computational analysis. Two models differing only in wing tip geometry were tested with and without flow-through nacelles. The baseline model has a curved or crescent wing tip shape while the second model has a more conventional straight wing tip shape. The study was conducted at Mach numbers from 0.30 to 1.19. Force data were obtained on both the straight and curved wing tip models. Only the curved wing tip model was instrumented for measuring pressures. Longitudinal and lateral-directional aerodynamic data are presented without analysis in tabulated form. Pressure coefficients for the curved wing tip model are also presented in tabulated form.

Introduction

Recent studies (ref. 1 and 2) have indicated that there is a large and growing potential market for a High-Speed Civil Transport (HSCT). This fact, along with a number of promising technological advances, has prompted a number of the aircraft companies to renew their research efforts for this class of aircraft. Their interest is reflected in the report of the Aeronautical Policy Review Committee (ref. 3), in which the second of three proposed national goals is the development of the technologies required for an economically viable and environmentally acceptable HSCT. In response to this report, NASA has implemented the High-Speed Research Program. As part of this program, NASA Langley initiated several contractor (ref. 1 and 2) and in-house (ref. 4 and 5) studies to evaluate a variety of configurations relative to these issues and technologies.

One of these configurations, the NASA Langley baseline Mach 3.0 aircraft (ref. 5), has been selected as the focus of the initial phase of the High-Speed Airframe Integration Research (HiSAIR) program. This program was established at Langley to promote the development of methodology for improving multidisciplinary analysis, design, and optimization of aircraft systems. Although an HSCT configuration was selected for developing this methodology, the resulting methods and processes would, in general, apply to all aircraft.

The first phase of the HiSAIR program involves performing a multidisciplinary analysis of the baseline configuration. As part of this effort, a hierarchy of aerodynamic codes ranging from linear to Navier-Stokes methods (ref. 6-8) have been used to analyze this configuration with the goal of comparing the relative accuracy and efficiency of the different methods. In order to provide a database for assessing the accuracy of the codes, force, moment, and pressure data have been obtained in two NASA Langley wind tunnels on a 0.01-scale model of the baseline Mach 3.0 configuration. Data at supersonic speeds were taken in both the high-speed and low-speed test sections of the Unitary Plan Wind Tunnel at Langley and has been reported in ref. 6. This data includes the primary design point at the cruise Mach number of 3.0. It is recognized, however, that an HSCT would probably be restricted to subsonic flight over land (ref. 1 and 4) and that this could represent a significant fraction of the total flight time. Therefore, the baseline Mach 3.0 model was also tested at subsonic and transonic speeds in the 8-Foot Transonic Pressure Tunnel (TPT).

The force, moment, and pressure data obtained during the 8-Foot TPT tests are presented in this report. The test Mach numbers range from 0.30 to 1.19 at a constant Reynolds number of 2.0 million per foot. The angle-of-attack range varied with the Mach number due to balance load limits, with the maximum range of -4° to 18° occurring at $M = 0.30$. In addition, lateral-directional data were taken at selected Mach numbers for sideslip angles ranging nominally from -7.5° to 5°. Force and moment data were also obtained for an alternate version of the baseline configuration having straight wing tips.

Symbol List

The results presented in this report are referred to the body-axis system except as noted. Force and moment data have been reduced to conventional coefficient form based on the geometry of the wing planform. Moments are referenced to the quarter-chord point of the mean aerodynamic chord of the wing. All measurements and calculations were made in U.S. Customary Units.

Coefficients and symbols used herein are defined as follows:

b wing span, 18.19 in.

C_A	axial-force coefficient, Axial force/ $q_\infty S$
C_D	drag coefficient, Drag/ $q_\infty S$
C_L	lift coefficient, Lift/ $q_\infty S$
C_I	rolling moment coefficient, Rolling moment/ $q_\infty S_b$
C_{ls}	rolling moment coefficient, stability axis, Rolling moment/ $q_\infty S_b$
$C_{l\beta}$	derivative of C_L with respect to β
C_m	pitching moment coefficient, Pitching moment/ $q_\infty S_c$
C_{ms}	pitching moment coefficient, stability axis, Pitching moment/ $q_\infty S_c$
$C_{m\alpha}$	derivative of C_m with respect to α
C_N	normal force coefficient, Normal force/ $q_\infty S$
$C_{N\alpha}$	derivative of C_N with respect to α
C_n	yawing moment coefficient, Yawing moment/ $q_\infty S_b$
C_{ns}	yawing moment coefficient, stability axis, Yawing moment/ $q_\infty S_b$
$C_{n\beta}$	derivative of C_n with respect to β
C_p	pressure coefficient, $(p - p_\infty)/q_\infty$
C_Y	side force coefficient, Side force/ $q_\infty S$
$C_{Y\beta}$	derivative of C_Y with respect to β
c	local wing chord, in.
\bar{c}	mean aerodynamic chord, 15.66 in.
L/D	lift-to-drag ratio
M_∞	free-stream Mach number
p	local pressure, psi
p_∞	free-stream static pressure, psi

q_∞	free-stream dynamic pressure, psi
r	local leading-edge radius, in.
S	reference wing area, 175.84 in. ²
x	longitudinal distance, positive aft, in.
y	distance left/right of model centerline, positive to left, in.
z	vertical distance, positive up, in.
α	model angle-of-attack, deg
β	model angle-of-sideslip, deg
η	fractional semi-span location of orifice rows, $2y/b$
ψ	model angle-of-yaw, deg

Abbreviations:

<i>B.L.</i>	butt line, in.
<i>L.E.</i>	leading-edge
<i>M.S.</i>	model station, in.

Model Description

The baseline, or curved wing tip model (figure 1) is a 0.01-scale version of the NASA Langley Mach 3.0 HSCT configuration described in reference 5 and is shown installed in the Langley 8-Foot Transonic Pressure Tunnel in figures 2 and 3. It consists of a highly blended wing-fuselage with flow-through engine nacelles mounted on the lower surface near and extending beyond the trailing edge of each wing. The constant duct area nacelles are removable to allow wing-body testing and thus simplifying grid generation requirements for computational comparisons. The inboard and outboard wing panels have leading-edge sweeps of 79° and 53°, respectively. The inboard panels are highly cambered and have rounded leading edges for increased leading edge suction at cruise conditions. The outer panels have sharp leading edges since their reduced sweep placed them ahead

of the Mach cone at cruise conditions. Airfoil sections for this configuration were derived using a NACA 65-series thickness form with the camber determined from supersonic linear theory design. The configuration has a "platypus" nose shape for additional lift and the wing-tip has a curved planform based on the concept for reducing pitch-up described in reference 5 . The aft section of the fuselage and the vertical tail are not included in the model to allow for the sting mounting system. The model wing reference area is 175.84 sq.in., the wing span is 18.19 in., and mean aerodynamic chord measures 15.66 in. Coordinates for the wing airfoil sections are given in Table I.

A second model with a more conventional straight wing tip was built to study the effect of tip shape on the pitch-up and induced drag characteristics for this type of aircraft. According to reference 5, having a straight wing tip geometry in conjunction with a highly swept wing should produce more pitch-up and less induced drag than a similar wing with a curved wing tip geometry. Figure 4 shows this straight wing tip model installed in the 8-Foot TPT. Figure 5 is a close-up comparison of the two wing tips. The wing span and area are the same for the two configurations.

The curved wing tip model was instrumented with 60 flush pressure orifices of .020-in. inside diameter, arranged in 2 chordwise and 4 spanwise rows as shown in figure 6 and listed in Table II. The pressure tubes exit at the model base and then were routed aft along the sting. The straight wing tip model was not pressure instrumented. Both models were fabricated from 7075 aluminum.

Apparatus and Procedures

Facility

These investigations were performed in the 8-Foot Transonic Pressure Tunnel at the NASA Langley Research Center. This facility is a variable-pressure slotted-throat wind tunnel that permits independent variations of Mach number, stagnation pressure, and temperature. The test section is a 7.125-foot square with filleted corners, giving a cross-sectional area approximately equivalent to an 8-foot diameter circle. The floor and the ceiling are axially slotted which results in approximately 6.9 percent open area in the calibrated test region. The side walls are solid and fitted with windows for schlieren flow visualization. Off-body flow visualization is obtained using a laser vapor screen

system designed for vortex-dominated flowfields. A description of the tunnel and data system are given in reference 9.

Tests

The present investigation was performed at Mach numbers from 0.30 to 1.19. All data were taken at a Reynolds number of 2.0 million per foot. The angle of attack range was dependent on the Mach number, with a maximum variation of -4° to 18° occurring at a Mach number of 0.30. Lateral-directional data were obtained for sideslip angles from -7.5° to 5° .

Pressure data were obtained for the curved tip model only. A dummy balance was used for these tests since the model was too small for both a balance and the number of pressure tubes installed. This would have resulted in extensive fouling and possible damage to a live balance. The pressure tubes were later removed to allow force and moment testing. Force and moment data were obtained for both models over the entire test envelope. Both models were tested with and without flow-through nacelles mounted on the wing lower surface.

Although not presented in this report, off-body flow visualization data were obtained at selected conditions for the curved-tip model using a laser light sheet system. This was used primarily to study the vortex patterns generated by the wing. Schlieren photography was used at the supersonic Mach numbers to verify that the shock waves reflecting from the tunnel walls were not impinging on the model.

Boundary-Layer Transition

Boundary-layer transition was fixed on the models by using transition strips composed of Carborundum grains set in a plastic adhesive. The roughness particle sizes and locations were selected according to the method of reference 10. The strips were approximately 0.06-in. wide bands of No. 120 Carborundum grains located .75 inches from the nose. No. 90 Carborundum grains were located .75 inches aft and perpendicular to the leading edge of the wing and .75 inches aft and perpendicular to the leading edge of the nacelles. The grit was applied to both upper and lower wing surfaces and both inner and outer nacelle surfaces.

Measurements and Corrections

Aerodynamic forces and moments for the models were measured using an internally mounted six-component strain-gauge balance. Model attitude was set using an accelerometer mounted on the sting support system. Output from the accelerometer was used in conjunction with the balance output to determine model attitude. For the case where a dummy balance was used, the following equation was solved iteratively to determine model attitude:

$$\alpha = \theta_s + (\bar{k}_n * f1(\alpha) + \bar{k}_\theta * f2(\alpha))$$

where $f1(\alpha)$ and $f2(\alpha)$ are regression polynomials for $C_{N\alpha}$ and for $C_{m\alpha}$ respectively which were determined when a balance was present, θ_s is the known accelerometer angle, and \bar{k}_n and \bar{k}_θ are nondimensional bending coefficients from the dummy balance.

Flow angularity was determined by testing the model in both upright and inverted positions. A correction of 0.28° upwash was applied to the data at $M_\infty = 1.19$. Corrections at other Mach numbers were negligible. Balance forces were adjusted to a condition of free-stream static pressure acting over the sting cavity area. No corrections were applied for internal drag of the flow-through nacelles. The accuracy of the data, based on instrument accuracy (.5-percent of full scale load on the balance), is estimated to be as follows:

$$C_N = \pm 0.006$$

$$C_A = \pm 0.0009$$

$$C_m = \pm 0.0008$$

$$C_l = \pm 0.0002$$

$$C_n = \pm 0.0004$$

$$C_Y = \pm 0.003$$

$$\alpha = \pm 0.01^\circ$$

$$\psi = \pm 0.20^\circ$$

$$M_\infty = \pm 0.001$$

(coefficient values are based on a conservative, nominal dynamic pressure of .97 psi. corresponding

to $M_\infty = 0.30$ data.)

Presentation of Results

The remainder of this paper will present tabulated data only from the wind tunnel test. Plots and analysis of selected results can be found in NASA TMXXX. Unless otherwise noted, the models are upright with the flow-through nacelles attached. Data are presented as follows:

Table

Force Data

Run Log - Force Data	III
Straight wing tip model, inverted	IV
Straight wing tip model	V
Straight wing tip model, nacelles off	VI
Curved wing tip model	VII
Curved wing tip model, nacelles off	VIII

Pressure Data, Curved Wing Tip Model Only

Run Log - Pressure Data	IX
Pressure coefficient data	X

Concluding Remarks

An aerodynamic data base was created for assessing the applicability of various levels of computational methods to analyze high-speed civil transport configurations. This was accomplished by testing two generic HSCT models in Langley's 8-Foot TPT. The two models differed geometrically only in the wing tip region where one model had curved wing tips and the second had straight wing tips. Force and pressure data were obtained on the curved wing tip model and force data only were obtained on the straight wing tip model from Mach 0.30 to 1.19. Both models were tested with flow-through engine nacelles on and off.

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Table I. Wing Definition

(a) $y = 0.900$ in.; $c = 23.134$ in.;

M.S. at L.E. = 1.963 in.; $r = .00567$ in.

x , in.	upper surface z , in.	lower surface z , in.
0.000000	-0.311864	-0.311863
1.535218	-0.346691	-0.346691
1.621048	-0.352843	-0.352842
1.923880	-0.375728	-0.375727
2.902939	-0.452498	-0.452497
4.359268	-0.575437	-0.575437
5.676326	-0.682707	-0.682706
6.643123	-0.757530	-0.757530
7.863940	-0.849977	-0.849977
8.281753	-0.879993	-0.879992
9.016973	-0.929336	-0.929335
10.107080	-0.993679	-0.993679
11.162483	-1.046540	-1.046539
12.180408	-1.094475	-1.094474
13.160857	-1.135928	-1.135927
14.086013	-1.174906	-1.174906
14.883234	-1.202767	-1.202767
15.804919	-1.231405	-1.231404
16.946152	-1.266037	-1.266037
18.293055	-1.296420	-1.296420
19.009071	-1.310433	-1.310432
19.728561	-1.322496	-1.322496
20.890383	-1.337642	-1.337641
21.981417	-1.350464	-1.350463
22.553770	-1.356110	-1.356110
23.134680	-1.362099	-1.362098

Table I. Continued

(b) $y = 1.120$ in.; $c = 22.037$ in.;

M.S. at L.E. = .00547 in.

x , in.	upper surface z , in.	lower surface z , in.
0.000000	-0.430451	-0.430451
1.462362	-0.414520	-0.414520
1.544118	-0.418280	-0.418280
1.832580	-0.433923	-0.433923
2.765178	-0.488388	-0.488388
4.152395	-0.588532	-0.588532
5.406950	-0.686525	-0.686525
6.327868	-0.758203	-0.758203
7.490749	-0.839014	-0.839014
7.888734	-0.865172	-0.865172
8.589064	-0.910249	-0.910249
9.627437	-0.973696	-0.973696
10.632756	-1.028544	-1.028544
11.602375	-1.075686	-1.075686
12.536294	-1.116707	-1.116707
13.417546	-1.152331	-1.152331
14.176935	-1.179915	-1.179915
15.054880	1.209469	1.209469
16.141956	1.241468	1.241468
17.424938	1.273830	1.273830
18.106977	1.288760	1.288760
18.792322	1.302483	1.302483
19.899010	1.322617	1.322617
20.938267	1.339781	1.339781
21.483454	1.348441	1.348441
22.036798	1.357116	1.357116

Table I. Continued

(c) $y = 1.800$ in.; $c = 17.941$ in.;M.S. at L.E. = 7.157 in.; $r = .00558$ in.

x , in.	upper surface z , in.	lower surface z , in.
0.000000	-0.546906	-0.546906
1.190546	-0.512697	-0.512697
1.257107	-0.513467	-0.513467
1.491950	-0.517694	-0.517694
2.251201	-0.538320	-0.538320
3.380570	-0.589818	-0.589818
4.401935	-0.647328	-0.647328
5.151678	-0.694195	-0.694195
6.098410	-0.756497	-0.756497
6.422420	-0.778284	-0.778284
6.992576	-0.816832	-0.816832
7.837941	-0.874076	-0.874076
8.656398	-0.928197	-0.928197
9.445789	-0.979066	-0.979066
10.206117	-1.026524	-1.026524
10.923566	-1.069717	-1.069717
11.541801	-1.104819	-1.104819
12.256561	-1.143514	-1.143514
13.141579	-1.187968	-1.187968
14.186085	1.235363	1.235363
14.741351	1.257991	1.257991
15.299308	1.278357	1.278357
16.200291	1.306551	1.306551
17.046375	1.329233	1.329233
17.490229	1.340301	1.340301
17.940720	1.351618	1.351618

Table I. Continued

(d) $y = 2.400$ in.; $c = 14.912$ in.;M.S. at L.E. = 10.202 in.; $r = .00397$ in.

x, in.	upper surface z, in.	lower surface z, in.
0.000000	-0.786224	-0.786224
0.989539	-0.724401	-0.724401
1.044862	-0.723093	-0.723093
1.240055	-0.719749	-0.719749
1.871118	-0.718416	-0.718416
2.809808	-0.735016	-0.735016
3.658731	-0.763328	-0.763328
4.281889	-0.789027	-0.789027
5.068778	-0.827170	-0.827170
5.338083	-0.841295	-0.841295
5.811977	-0.866823	-0.866823
6.514616	-0.906092	-0.906092
7.194885	-0.945457	-0.945457
7.851000	-0.984014	-0.984014
8.482956	-1.021177	-1.021177
9.079275	-1.055918	-1.055918
9.593131	-1.085624	-1.085624
10.187213	-1.119242	-1.119242
10.922805	-1.159812	-1.159812
11.790964	1.205435	1.205435
12.252480	1.228595	1.228595
12.716233	1.250157	1.250157
13.465097	1.282096	1.282096
14.168332	1.309932	1.309932
14.537248	1.324489	1.324489
14.911679	1.338683	1.338683

Table I. Continued

(e) $y = 3.240$ in.; $c = 10.760$ in.;M.S. at L.E. = 14.721 in.; $r = .00332$ in.

x , in.	upper surface z , in.	lower surface z , in.
0.000000	-0.975824	-0.975824
0.714052	-0.916581	-0.916581
0.753973	-0.914493	-0.914493
0.894824	-0.908005	-0.908005
1.350200	-0.894812	-0.894812
2.027560	-0.887991	-0.887991
2.640143	-0.888338	-0.888338
3.089814	-0.894011	-0.894011
3.657635	-0.906314	-0.906314
3.851965	-0.911425	-0.911425
4.193927	-0.920980	-0.920980
4.700951	-0.937589	-0.937589
5.191835	-0.955338	-0.955338
5.665288	-0.974284	-0.974284
6.121308	-0.993921	-0.993921
6.551611	-1.012989	-1.012989
6.922411	-1.029730	-1.029730
7.351100	-1.049372	-1.049372
7.881905	-1.073995	-1.073995
8.508368	-1.102027	-1.102027
8.841399	-1.117642	-1.117642
9.176044	-1.132790	-1.132790
9.716425	-1.154786	-1.154786
10.223880	-1.174958	-1.174958
10.490089	-1.185916	-1.185916
10.760280	-1.196411	-1.196411

Table I. Continued

(f) $y = 4.104$ in.; $c = 6.642$ in.;M.S. at L.E. = 19.240 in.; $r = .00346$ in.

x , in.	upper surface z , in.	lower surface z , in.
0.000000	-1.079943	-1.079943
0.440755	-1.042277	-1.042277
0.406540	-1.040644	-1.040644
0.552338	-1.033818	-1.033818
0.833423	-1.017775	-1.017775
1.251529	-1.004517	-1.004517
1.629652	-0.997975	-0.997975
1.907216	-0.994311	-0.994311
2.257708	-0.991025	-0.991025
2.377661	-0.990354	-0.990354
2.588740	-0.988796	-0.988796
2.901704	-0.986524	-0.986524
3.204707	-0.984991	-0.984991
3.496950	-0.985023	-0.985023
3.778433	-0.984204	-0.984204
4.044043	-0.984628	-0.984628
4.272921	-0.984003	-0.984003
4.537534	-0.984176	-0.984176
4.865177	-0.984563	-0.984563
5.251867	-0.985937	-0.985937
5.457434	-0.987515	-0.987515
5.663997	-0.988237	-0.988237
5.997551	-0.986773	-0.986773
6.310782	-0.988488	-0.988488
6.475102	-0.989948	-0.989948
6.641880	-0.990961	-0.990961

Table I. Continued

(g) $y = 4.800$ in.; $c = 5.678$ in.;M.S. at L.E. = 20.560 in.; $r = .00553$ in.

x , in.	upper surface z , in.	lower surface z , in.
0.000000	-0.960001	-0.960001
0.376787	-0.956774	-0.956774
0.397852	-0.956601	-0.956601
0.472176	-0.955991	-0.955991
0.712465	-0.954169	-0.954169
1.069890	-0.952149	-0.952149
1.393134	-0.950571	-0.950571
1.630415	-0.949428	-0.949428
1.930038	-0.947958	-0.947958
2.032582	-0.947398	-0.947398
2.213026	-0.946437	-0.946437
2.480569	-0.945185	-0.945185
2.739596	-0.944218	-0.944218
2.989424	-0.943491	-0.943491
3.230056	-0.942941	-0.942941
3.457115	-0.942579	-0.942579
3.652776	-0.942317	-0.942317
3.878984	-0.942239	-0.942239
4.159077	-0.942296	-0.942296
4.489645	-0.942122	-0.942122
4.665377	-0.942043	-0.942043
4.841960	-0.942076	-0.942076
5.127104	-0.942370	-0.942370
5.394876	-0.942948	-0.942948
5.535348	-0.943348	-0.943348
5.677920	-0.943987	-0.943987

Table I. Continued

(h) $y = 6.360$ in.; $c = 4.278$ in.;M.S. at L.E. = 22.773 in.; $r = .00000$ in.

x , in.	upper surface z , in.	lower surface z , in.
0.00000	-0.780487	-0.780487
0.283904	-0.789043	-0.789043
0.299777	-0.789504	-0.789504
0.355778	-0.791107	-0.791107
0.536833	-0.796067	-0.796067
0.806149	-0.802859	-0.802859
1.049708	-0.808570	-0.808570
1.228496	-0.812596	-0.812596
1.454260	-0.817391	-0.817391
1.531524	-0.818926	-0.818926
1.667486	-0.821613	-0.821613
1.869078	-0.825291	-0.825291
2.064251	-0.828544	-0.828544
2.252494	-0.831316	-0.831316
2.433805	-0.833680	-0.833680
2.604892	-0.835729	-0.835729
2.752320	-0.837137	-0.837137
2.922765	-0.838348	-0.838348
3.133811	-0.839608	-0.839608
3.382890	-0.840662	-0.840662
3.515301	-0.840864	-0.840864
3.648355	-0.841044	-0.841044
3.863208	-0.841375	-0.841375
4.064970	-0.841719	-0.841719
4.170814	-0.841962	-0.841962
4.278240	-0.841948	-0.841948

Table I. Continued

(i) $y = 8.160$ in.; $c = 3.032$ in.;M.S. at L.E. = 25.259 in.; $r = .00000$ in.

x , in.	upper surface z , in.	lower surface z , in.
0.000000	-0.672000	-0.672000
0.201191	-0.674608	-0.674608
0.212438	-0.674765	-0.674765
0.252125	-0.675314	-0.675314
0.380430	-0.677045	-0.677045
0.571282	-0.679462	-0.679462
0.743882	-0.681484	-0.681484
0.870581	-0.682988	-0.682988
1.030570	-0.684823	-0.684823
1.085323	-0.685471	-0.685471
1.181675	-0.686476	-0.686476
1.324533	-0.688090	-0.688090
1.462843	-0.689624	-0.689624
1.596242	-0.690966	-0.690966
1.724730	-0.691800	-0.691800
1.845972	-0.692652	-0.692652
1.950448	-0.693475	-0.693475
2.071235	-0.694147	-0.694147
2.220793	-0.694395	-0.694395
2.397305	-0.694966	-0.694966
2.491139	-0.695303	-0.695303
2.585428	-0.695358	-0.695358
2.737685	-0.695064	-0.695064
2.880665	-0.694782	-0.694782
2.955672	-0.695013	-0.695013
3.031800	-0.695586	-0.695586

Table I. Continued

(j) $y = 8.640$ in.; $c = 2.572$ in.;M.S. at L.E. = 26.357 in.; $r = .00000$ in.

x , in.	upper surface z , in.	lower surface z , in.
0.00000	-0.707999	-0.707999
0.170683	-0.708033	-0.708033
0.180226	-0.708040	-0.708040
0.213894	-0.708064	-0.708064
0.322745	-0.708144	-0.708144
0.484657	-0.708233	-0.708233
0.631086	-0.708423	-0.708423
0.738572	-0.708651	-0.708651
0.874302	-0.708896	-0.708896
0.920753	-0.709031	-0.709031
1.002494	-0.709292	-0.709292
1.123691	-0.709704	-0.709704
1.241029	-0.710116	-0.710116
1.354200	-0.710559	-0.710559
1.463204	-0.710989	-0.710989
1.566062	-0.711366	-0.711366
1.654697	-0.711658	-0.711658
1.757168	-0.712090	-0.712090
1.884049	-0.712637	-0.712637
2.033795	-0.713017	-0.713017
2.113400	-0.713093	-0.713093
2.193393	-0.713105	-0.713105
2.322563	-0.713052	-0.713052
2.443862	-0.712963	-0.712963
2.507495	-0.712874	-0.712874
2.572080	-0.712748	-0.712748

Table I. Concluded

(k) $y = 9.036$ in.; $c = 1.008$ in.;M.S. at L.E. = 28.608 in.; $r = .00000$ in.

x , in.	upper surface z , in.	lower surface z , in.
0.000000	0.723127	0.723127
0.066890	0.722951	0.722951
0.070631	0.722941	0.722941
0.083825	0.722906	0.722906
0.126484	0.722794	0.722794
0.189937	0.722627	0.722627
0.247322	0.722475	0.722475
0.289447	0.722365	0.722365
0.342640	0.722225	0.722225
0.360844	0.722177	0.722177
0.392878	0.722092	0.722092
0.440375	0.721967	0.721967
0.486360	0.721846	0.721846
0.530712	0.721730	0.721730
0.573431	0.721617	0.721617
0.613741	0.721511	0.721511
0.648476	0.721419	0.721419
0.688636	0.721313	0.721313
0.738360	0.721182	0.721182
0.797046	0.721028	0.721028
0.828244	0.720946	0.720946
0.859592	0.720863	0.720863
0.910214	0.720730	0.720730
0.957751	0.720605	0.720605
0.982690	0.720539	0.720539
1.008000	0.720473	0.720473

Table II. Pressure Orifice Locations

Orifice	x, in.	y, in.	Orifice	x, in.	y, in.
CP1	8.875	0.000	CP34	20.670	3.522
CP2	8.875	0.352	CP35	20.670	3.874
CP3	8.875	0.705	CP36	20.670	4.226
CP4	8.875	1.057	CP37	20.670	4.578
CP5	8.875	1.409	CP39	23.000	6.040
CP6	8.875	1.762	CP40	23.473	6.040
CP7	8.875	2.114	CP41	23.945	6.040
CP8	10.560	2.114	CP42	24.419	6.040
CP9	12.245	2.114	CP43	24.892	6.040
CP10	13.930	2.114	CP44	25.366	6.040
CP11	15.615	0.000	*CP45	20.670	-1.410
CP12	15.615	0.352	*CP46	20.670	-1.762
CP13	15.615	0.705	*CP47	20.670	-2.114
CP14	15.615	1.057	*CP48	20.670	-2.466
CP15	15.615	1.409	*CP49	20.670	-2.818
CP16	15.615	1.762	*CP50	20.670	-4.000
CP17	15.615	2.114	*CP51	23.000	-3.800
CP18	15.615	2.466	*CP52	23.000	-3.600
CP19	15.615	2.818	*CP53	23.000	-3.400
CP20	15.615	3.170	*CP54	23.000	-3.200
CP21	15.615	3.303	*CP55	23.000	-3.000
CP22	17.300	2.114	*CP56	23.000	-1.200
CP23	18.985	2.114	*CP57	23.000	-1.000
CP24	20.670	0.000	*CP58	23.000	-0.800
CP25	20.670	0.352	*CP59	23.000	-0.600
CP26	20.670	0.705	*CP60	23.000	-0.400
CP27	20.670	1.057	*CP61	24.000	-2.060
CP28	20.670	1.409	CP62	26.000	0.000
CP29	20.670	1.762	CP63	26.000	-max
CP30	20.670	2.114	CP64	26.000	+max
CP32	20.670	2.818	CP65	26.000	0.000
CP33	20.670	3.170			

+ -max max, min vertical distance

* lower surface orifices

Table III. Run Log - Force Data

Run	Points	M_∞	β	Model	Table	Comments
11	120-136	1.19	0.0	straight tip	IV	inverted
12	141-157	1.10	0.0	straight tip	IV	inverted
12	158-174	0.95	0.0	straight tip	IV	inverted
12	175-191	0.90	0.0	straight tip	IV	inverted
12	192-208	0.85	0.0	straight tip	IV	inverted
12	209-225	0.80	0.0	straight tip	IV	inverted
12	226-243	0.75	0.0	straight tip	IV	inverted
12	244-260	0.70	0.0	straight tip	IV	inverted
12	261-277	0.60	0.0	straight tip	IV	inverted
12	278-294	0.30	0.0	straight tip	IV	inverted
14	314-323	1.19	0.0	straight tip	V	
14	324-333	1.10	0.0	straight tip	V	
14	334-343	0.95	0.0	straight tip	V	
14	344-353	0.90	0.0	straight tip	V	
14	354-363	0.90	5.0	straight tip	V	
14	364-373	0.90	-5.0	straight tip	V	
14	374-384	0.85	0.0	straight tip	V	
14	385-397	0.80	0.0	straight tip	V	
14	398-407	0.80	5.0	straight tip	V	
14	408-417	0.80	-5.0	straight tip	V	
17	440-450	0.75	0.0	straight tip	V	
17	451-461	0.70	0.0	straight tip	V	
17	462-472	0.70	5.0	straight tip	V	
17	473-483	0.70	-5.0	straight tip	V	
17	484-495	0.60	0.0	straight tip	V	
17	496-507	0.30	5.0	straight tip	V	
17	508-519	0.30	0.0	straight tip	V	
17	520-530	0.30	-5.0	straight tip	V	
19	550-559	1.19	0.0	straight tip	VI	nacelles off
19	560-569	1.10	0.0	straight tip	VI	nacelles off
19	570-579	0.95	0.0	straight tip	VI	nacelles off
20	584-593	0.90	0.0	straight tip	VI	nacelles off
20	594-603	0.90	-5.0	straight tip	VI	nacelles off
20	604-614	0.85	0.0	straight tip	VI	nacelles off
20	615-625	0.80	0.0	straight tip	VI	nacelles off
20	627-637	0.80	-5.0	straight tip	VI	nacelles off
20	638-648	0.75	0.0	straight tip	VI	nacelles off
20	649-659	0.70	0.0	straight tip	VI	nacelles off
20	660-670	0.70	-5.0	straight tip	VI	nacelles off
20	672-682	0.60	0.0	straight tip	VI	nacelles off
20	683-694	0.30	0.0	straight tip	VI	nacelles off
20	695-706	0.30	-5.0	straight tip	VI	nacelles off

Table III. Concluded

Run	Points	M_∞	β	Model	Table	Comments
6	110-119	1.19	0.0	curved tip	VII	
6	120-129	1.10	0.0	curved tip	VII	
6	130-139	0.95	0.0	curved tip	VII	
12	541-550	0.90	5.0	curved tip	VII	
12	551-560	0.90	0.0	curved tip	VII	
12	561-570	0.90	-5.0	curved tip	VII	
6	150-159	0.85	0.0	curved tip	VII	
6	161-170	0.80	5.0	curved tip	VII	
6	216-226	0.80	0.0	curved tip	VII	
6	227-234	0.80	-5.0	curved tip	VII	
6	171-180	0.75	0.0	curved tip	VII	
6	181-191	0.70	5.0	curved tip	VII	
6	192-205	0.70	0.0	curved tip	VII	
6	206-215	0.70	-5.0	curved tip	VII	
6	236-246	0.60	0.0	curved tip	VII	
6	247-258	0.30	5.0	curved tip	VII	
6	259-270	0.30	0.0	curved tip	VII	
6	271-282	0.30	-5.0	curved tip	VII	
6	283-293	0.30	-7.5	curved tip	VII	
10	329-338	1.19	0.0	curved tip	VIII	nacelles off
10	339-349	1.10	0.0	curved tip	VIII	nacelles off
10	350-359	0.95	0.0	curved tip	VIII	nacelles off
10	360-368	0.90	0.0	curved tip	VIII	nacelles off
10	369-378	0.90	5.0	curved tip	VIII	nacelles off
10	379-388	0.90	-5.0	curved tip	VIII	nacelles off
11	393-403	0.85	0.0	curved tip	VIII	nacelles off
11	404-413	0.80	5.0	curved tip	VIII	nacelles off
11	414-424	0.80	0.0	curved tip	VIII	nacelles off
11	425-434	0.80	-5.0	curved tip	VIII	nacelles off
11	435-445	0.75	0.0	curved tip	VIII	nacelles off
11	446-455	0.70	5.0	curved tip	VIII	nacelles off
11	456-466	0.70	0.0	curved tip	VIII	nacelles off
11	467-477	0.70	-5.0	curved tip	VIII	nacelles off
11	478-488	0.60	0.0	curved tip	VIII	nacelles off
11	489-500	0.30	5.0	curved tip	VIII	nacelles off
11	501-512	0.30	0.0	curved tip	VIII	nacelles off
11	513-524	0.30	-5.0	curved tip	VIII	nacelles off
11	525-536	0.30	-7.5	curved tip	VIII	nacelles off

Table IV. Force and Moment Data for the Straight Wing Tip Model, Inverted

Run	Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_n	C_Y	C_L	C_D	C_{ls}	C_{ms}	C_{ns}	L/D
11	120	1.194	3.727	0.024	2.891	0.2002	0.0186	0.0004	-0.0106	-0.0001	-0.0004	0.1986	0.0316	0.0004	-0.0106	-0.0001	6.2909
11	121	1.194	2.742	0.017	2.897	0.1594	0.0181	0.0002	-0.0083	0.0000	0.0002	0.1583	0.0257	0.0002	-0.0083	0.0000	6.1548
11	122	1.194	3.234	0.019	2.896	0.1792	0.0183	0.0002	-0.0097	0.0000	0.0001	0.1779	0.0284	0.0002	-0.0097	0.0000	6.2623
11	123	1.195	2.222	0.016	2.890	0.1385	0.0180	0.0002	-0.0067	0.0000	0.0000	0.1377	0.0233	0.0002	-0.0067	0.0000	5.9010
11	124	1.195	1.714	0.014	2.900	0.1190	0.0178	0.0001	-0.0051	0.0000	0.0002	0.1184	0.0214	0.0001	-0.0051	0.0000	5.5344
11	125	1.195	1.235	0.015	2.896	0.1000	0.0177	0.0001	-0.0034	0.0000	0.0001	0.0996	0.0199	0.0001	-0.0034	0.0000	5.0180
11	126	1.195	0.718	0.016	2.897	0.0802	0.0175	0.0001	-0.0015	0.0000	0.0003	0.0799	0.0185	0.0001	-0.0015	0.0000	4.3119
11	127	1.194	0.235	0.016	2.891	0.0611	0.0172	0.0001	0.0004	0.0000	0.0001	0.0610	0.0174	0.0001	0.0004	0.0000	3.5001
11	128	1.195	-0.283	0.017	2.892	0.0414	0.0169	0.0001	0.0024	0.0000	0.0003	0.0414	0.0167	0.0001	0.0024	0.0000	2.4799
11	129	1.194	-0.784	0.017	2.892	0.0222	0.0165	0.0000	0.0044	0.0000	0.0002	0.0224	0.0162	0.0000	0.0044	0.0000	1.3837
11	130	1.195	-1.313	0.017	2.891	0.0030	0.0159	0.0000	0.0063	0.0001	0.0002	0.0033	0.0159	0.0000	0.0063	0.0001	0.2106
11	131	1.195	-1.788	0.017	2.899	-0.0148	0.0155	0.0000	0.0081	0.0000	0.0004	-0.0143	0.0159	0.0000	0.0081	0.0000	-0.8977
11	132	1.194	-2.288	0.017	2.890	-0.0346	0.0148	-0.0001	0.0100	0.0000	0.0001	-0.0340	0.0162	-0.0001	0.0100	0.0000	-2.1009
11	133	1.195	-2.793	0.018	2.895	-0.0554	0.0141	-0.0001	0.0119	0.0000	0.0002	-0.0546	0.0168	-0.0001	0.0119	0.0000	-3.2483
11	134	1.195	-3.309	0.018	2.899	-0.0768	0.0133	-0.0001	0.0138	0.0000	0.0003	-0.0759	0.0177	-0.0001	0.0138	0.0000	-4.2835
11	135	1.195	-3.789	0.009	2.889	-0.0973	0.0124	-0.0001	0.0156	0.0000	0.0003	-0.0963	0.0188	-0.0001	0.0156	0.0000	-5.1223
11	136	1.194	-4.294	0.009	2.895	-0.1194	0.0113	-0.0001	0.0175	0.0000	0.0003	-0.1182	0.0202	-0.0001	0.0175	0.0000	-5.8387
12	141	1.103	-4.013	0.011	2.790	-0.0924	0.0138	-0.0001	0.0174	0.0000	0.0003	-0.0913	0.0202	-0.0001	0.0174	0.0000	-4.5141
12	142	1.103	-3.502	0.015	2.790	-0.0705	0.0147	-0.0001	0.0153	0.0000	0.0002	-0.0694	0.0189	-0.0001	0.0153	0.0000	-3.6656
12	143	1.103	-3.010	0.014	2.790	-0.0484	0.0154	0.0000	0.0131	0.0000	0.0003	-0.0475	0.0179	0.0000	0.0131	0.0000	-2.6474
12	144	1.103	-2.509	0.015	2.790	-0.0272	0.0161	0.0000	0.0110	0.0000	0.0004	-0.0264	0.0173	0.0000	0.0110	0.0000	-1.5299
12	145	1.103	-2.007	0.014	2.790	-0.0062	0.0167	0.0001	0.0088	0.0000	0.0004	-0.0056	0.0169	0.0001	0.0088	0.0000	-0.3298
12	146	1.102	-1.509	0.013	2.789	0.0136	0.0172	0.0001	0.0067	-0.0001	0.0003	0.0141	0.0169	0.0002	0.0067	-0.0001	0.8350
12	147	1.102	-1.008	0.013	2.789	0.0329	0.0176	0.0002	0.0047	-0.0001	0.0005	0.0332	0.0171	0.0002	0.0047	-0.0001	1.9428
12	148	1.103	-0.504	0.012	2.790	0.0526	0.0180	0.0003	0.0025	0.0000	0.0003	0.0527	0.0176	0.0003	0.0025	0.0000	3.0038
12	149	1.102	-0.006	0.015	2.789	0.0732	0.0183	0.0003	0.0002	-0.0001	0.0003	0.0732	0.0183	0.0003	0.0002	-0.0001	3.9974
12	150	1.102	0.492	0.011	2.789	0.0939	0.0186	0.0004	-0.0021	0.0000	0.0003	0.0938	0.0194	0.0004	-0.0021	0.0000	4.8447
12	151	1.103	1.014	0.010	2.789	0.1161	0.0188	0.0004	-0.0044	0.0000	0.0004	0.1158	0.0209	0.0004	-0.0044	0.0000	5.5475
12	152	1.103	1.514	0.012	2.790	0.1374	0.0189	0.0004	-0.0067	0.0000	0.0003	0.1369	0.0226	0.0004	-0.0067	0.0000	6.0666
12	153	1.103	1.986	0.010	2.790	0.1580	0.0190	0.0004	-0.0087	0.0000	0.0002	0.1572	0.0245	0.0004	-0.0087	0.0000	6.4302
12	154	1.103	2.531	0.010	2.790	0.1822	0.0192	0.0004	-0.0110	0.0000	0.0001	0.1812	0.0272	0.0004	-0.0110	0.0000	6.6663
12	155	1.102	3.014	0.014	2.788	0.2037	0.0194	0.0005	-0.0127	0.0000	0.0001	0.2024	0.0301	0.0005	-0.0127	0.0000	6.7256
12	156	1.103	3.512	0.020	2.788	0.2265	0.0200	0.0008	-0.0132	0.0000	-0.0003	0.2248	0.0338	0.0008	-0.0132	-0.0001	6.6467
12	157	1.103	4.018	0.026	2.788	0.2502	0.0207	0.0009	-0.0133	-0.0001	-0.0009	0.2482	0.0382	0.0009	-0.0133	-0.0002	6.4979
12	158	0.951	-4.042	0.018	2.566	-0.1044	0.0102	-0.0005	0.0180	0.0001	-0.0001	-0.1035	0.0175	-0.0005	0.0180	0.0001	-5.8967
12	159	0.951	-3.575	0.011	2.566	-0.0837	0.0110	-0.0004	0.0166	0.0001	-0.0003	-0.0828	0.0162	-0.0005	0.0166	0.0000	-5.1146

Rim Point	M_∞	a	β	q_∞	C_n	C_a	C_l	C_m	C_y	C_d	C_{l_d}	C_s	C_{ms}	C_{ls}	L/D
160	0.950	-2.990	0.007	2.566	-0.0579	0.0119	-0.0004	0.0147	0.0001	-0.0572	0.0149	-0.0004	0.0147	0.0001	-3.8255
161	0.950	-2.521	0.014	2.565	-0.0372	0.0126	-0.0003	0.0131	-0.0187	0.0001	-0.0001	-0.0182	0.0118	0.0001	-2.5641
162	0.950	-2.078	0.013	2.566	-0.0132	0.0126	-0.0003	0.0131	-0.0187	0.0001	-0.0001	-0.0182	0.0118	0.0001	-1.3189
163	0.950	-1.576	0.013	2.567	0.0023	0.0137	-0.0002	0.0101	0.0001	0.0001	0.0001	0.0226	0.0138	0.0002	0.0101
164	0.951	-1.082	0.014	2.567	0.0223	0.0142	-0.0002	0.0086	0.0000	0.0001	0.0001	0.0138	0.0002	0.0086	0.0001
165	0.950	-0.543	0.010	2.566	0.0431	0.0111	-0.0001	0.0431	0.0001	0.0001	0.0001	0.0142	0.0001	0.0068	0.0001
166	0.950	-0.009	2.566	0.0650	0.0148	0.0001	-0.0001	0.0650	0.0000	0.0000	0.0000	0.0148	0.0001	0.0050	0.0001
167	0.950	0.537	0.009	2.566	0.0890	0.0151	-0.0001	0.0001	0.1128	0.0002	0.0001	0.0159	0.0001	0.0028	0.0001
168	0.950	1.072	0.011	2.566	0.1128	0.0131	-0.0001	0.0000	0.1329	0.0001	0.0001	0.1125	0.0152	0.0000	0.1521
169	0.950	1.503	0.011	2.566	0.1329	0.0128	-0.0001	0.0001	0.1329	0.0002	0.0001	0.1125	0.0163	0.0001	0.1521
170	0.951	2.025	0.010	2.566	0.1579	0.0013	-0.0001	0.0038	0.0001	0.0001	0.0001	0.1579	0.0043	0.0002	37.0914
171	0.950	2.531	0.010	2.567	0.1579	0.0013	-0.0001	0.0038	0.0001	0.0001	0.0001	0.1579	0.0043	0.0002	8.4547
172	0.950	2.979	0.017	2.486	0.0956	0.0077	-0.0005	0.0156	0.02534	0.0005	0.0005	0.0949	0.0143	0.0004	7.5585
173	0.950	3.534	0.020	2.568	0.2314	0.0147	-0.0005	0.0078	0.0001	0.0007	0.0001	0.2517	0.0333	0.0005	0.0002
174	0.950	4.014	0.025	2.567	0.2534	0.0156	-0.0005	0.0071	0.0001	0.0001	0.0001	0.2517	0.0333	0.0005	7.9546
175	0.902	-3.973	0.017	2.486	0.0956	0.0077	-0.0004	0.0145	0.0145	0.0002	0.0001	0.0949	0.0143	0.0004	6.6134
176	0.903	-3.550	0.019	2.490	0.0782	0.0086	-0.0004	0.0138	0.0138	0.0001	0.0001	0.0725	0.0134	0.0004	5.7918
177	0.898	-3.094	0.019	2.473	0.0588	0.0093	-0.0004	0.0127	0.0127	0.0002	0.0002	0.0582	0.0125	0.0004	4.6689
178	0.901	-2.577	0.017	2.479	0.0857	0.0123	-0.0004	0.0125	0.0125	0.0001	0.0001	0.0856	0.0132	0.0001	4.9863
179	0.903	-2.071	0.023	2.490	0.1169	0.0105	-0.0005	0.0169	0.0169	0.0003	0.0003	0.1165	0.0111	0.0106	-1.4884
180	0.902	-1.553	0.015	2.486	0.0031	0.0112	-0.0002	0.0094	0.0001	0.0009	0.0009	0.0165	0.0111	0.0003	-0.0004
181	0.900	-1.006	0.011	2.481	0.0242	0.0117	-0.0002	0.0081	0.0001	0.0071	0.0000	0.0116	0.0113	0.0002	2.1612
182	0.900	-0.557	0.011	2.482	0.0412	0.0120	-0.0002	0.0081	0.0000	0.0000	0.0000	0.0244	0.0113	0.0081	0.0000
183	0.899	-0.062	0.013	2.479	0.0603	0.0122	-0.0003	0.0071	0.0001	0.0000	0.0000	0.0121	0.0121	0.0001	3.5745
184	0.899	0.576	0.019	2.479	0.084	0.0125	-0.0003	0.0162	0.0001	0.0027	0.0001	0.0145	0.0145	0.0001	6.4940
185	0.901	1.059	0.017	2.479	0.0857	0.0123	-0.0003	0.0162	0.0001	0.0027	0.0001	0.0145	0.0145	0.0001	7.3101
186	0.903	1.543	0.018	2.489	0.1270	0.0126	-0.0003	0.0012	0.0000	0.0000	0.0000	0.0160	0.0160	0.0000	7.3101
187	0.900	2.041	0.014	2.480	0.1496	0.0128	-0.0004	0.0001	0.0001	0.0000	0.0000	0.0181	0.0191	0.0000	8.2282
188	0.897	2.547	0.014	2.478	0.1729	0.0130	-0.0004	0.0001	0.0001	0.0000	0.0000	0.0207	0.0207	0.0001	8.3265
189	0.899	2.547	0.018	2.478	0.1919	0.0133	-0.0004	0.0001	0.0001	0.0000	0.0000	0.0236	0.0236	0.0001	8.20018
190	0.903	3.501	0.018	2.471	0.1951	0.0133	-0.0004	0.0001	0.0001	0.0000	0.0000	0.0236	0.0236	0.0000	8.2345
191	0.898	4.050	0.027	2.473	0.2467	0.0149	-0.0007	0.0001	0.0001	0.0000	0.0000	0.0273	0.0273	0.0001	6.4812
192	0.850	4.029	0.011	2.389	0.0950	0.0079	-0.0004	0.0001	0.0001	0.0000	0.0000	0.0145	0.0145	0.0000	5.6993
193	0.850	-3.589	0.009	2.398	0.0768	0.0086	-0.0004	0.0001	0.0001	0.0000	0.0000	0.0145	0.0145	0.0000	4.3812
194	0.852	-3.026	0.021	2.398	0.0595	0.0095	-0.0005	0.0003	0.0003	0.0000	0.0000	0.0123	0.0123	0.0000	4.3255
195	0.849	-2.540	0.018	2.388	0.0348	0.0102	-0.0002	0.0008	0.0001	0.0000	0.0000	0.0117	0.0117	0.0000	-2.9324

Table IV. Continued

Table IV. Continued

Run Point	M_∞	a	β	q_∞	C_N	C_A	C_I	C_m	C_n	C_y	C_L	C_D	C_{L_0}	C_{n_0}	C_{ns}	$C_{ns}/L/D$
196	0.852	-2.001	0.018	2.399	-0.0140	0.0108	-0.0003	0.0100	0.0001	-0.0136	-0.0113	-0.0003	0.0100	0.0000	-1.2098	
197	0.849	-1.531	0.017	2.384	0.0038	0.0113	-0.0002	0.0091	0.0001	0.0041	0.0112	-0.0002	0.0091	0.0000	-1.2098	
198	0.850	-1.049	0.019	2.389	0.0217	0.0117	-0.0002	0.0002	0.0083	0.0000	-0.0001	0.0219	0.0113	-0.0002	0.0083	0.0000
199	0.852	-0.572	0.014	2.399	0.0390	0.019	-0.0001	0.0001	0.0003	0.0003	0.0001	0.0391	0.0116	-0.0001	0.0073	0.3626
200	0.850	0.029	0.014	2.388	0.0390	0.0120	-0.0001	0.0001	0.0003	0.0003	0.0001	0.0610	0.0122	-0.0001	0.0062	0.0000
201	0.852	0.511	0.015	2.399	0.0800	0.0123	-0.0004	0.0000	0.0040	0.0124	0.0000	0.0799	0.0131	0.0001	0.0051	0.1204
202	0.852	1.001	0.014	2.397	0.0992	0.0124	-0.0004	0.0000	0.0040	0.0002	0.0000	0.0990	0.0141	0.0000	0.0040	0.0000
203	0.850	1.519	0.015	2.390	0.1209	0.0125	-0.0004	0.0000	0.0028	0.0002	0.0000	0.1205	0.0157	0.0000	0.0028	0.0000
204	0.852	2.011	0.016	2.396	0.1426	0.0128	-0.0004	0.0001	0.0013	0.0002	0.0002	0.1420	0.0178	0.0000	0.0028	0.0000
205	0.851	2.540	0.015	2.393	0.1659	0.0129	-0.0001	0.0001	0.0000	0.0001	0.0001	0.1652	0.0203	0.0003	0.0013	0.1453
206	0.851	3.031	0.017	2.394	0.1881	0.0132	-0.0001	0.0001	0.0000	0.0008	0.0000	0.1871	0.0231	0.0003	0.0008	0.0000
207	0.852	3.546	0.024	2.394	0.2396	0.0136	-0.0001	0.0001	0.0008	0.0005	0.0001	0.2123	0.0271	0.0007	0.0008	0.0987
208	0.853	4.026	0.013	2.299	0.2400	0.0146	-0.0004	0.0001	0.0120	0.0008	0.0001	0.2350	0.0312	0.0008	0.0002	0.5358
209	0.801	-4.082	0.013	2.297	-0.0949	0.0079	-0.0004	0.0000	0.0003	0.0041	0.0000	0.0146	0.0120	0.0000	-6.4402	
210	0.802	-3.556	0.013	2.299	-0.0737	0.0088	-0.0004	0.0000	0.0003	0.0114	0.0000	0.0730	0.0133	0.0003	-5.4726	
211	0.800	-3.050	0.018	2.291	-0.0535	0.0096	-0.0003	0.0003	0.0109	0.0114	0.0000	0.1124	0.0141	0.0000	-4.2540	
212	0.801	-2.525	0.016	2.298	-0.0214	0.0118	-0.0002	0.0000	0.0082	0.0002	0.0000	0.226	0.0118	0.0003	-2.7659	
213	0.803	-2.093	0.017	2.306	-0.0125	0.0113	-0.0003	0.0003	0.0103	0.0003	0.0001	0.167	0.0113	0.0003	-1.4804	
214	0.800	-1.552	0.014	2.294	-0.0025	0.0113	-0.0003	0.0003	0.0097	0.0003	0.0001	0.090	0.0112	0.0002	0.2466	
215	0.800	-1.028	0.015	2.294	-0.0214	0.0118	-0.0002	0.0000	0.0082	0.0002	0.0000	0.216	0.0114	0.0000	1.8980	
216	0.801	-0.550	0.013	2.298	-0.0124	0.0120	-0.0001	0.0000	0.0075	0.0002	0.0000	0.117	0.0075	0.0000	3.3006	
217	0.800	0.028	0.014	2.294	-0.0594	0.0123	-0.0001	0.0001	0.0065	0.0000	0.0001	0.123	0.0075	0.0000	4.8262	
218	0.801	0.503	0.015	2.297	-0.0769	0.0123	-0.0001	0.0000	0.0057	0.0002	0.0000	0.1368	0.0176	0.0001	7.8906	
219	0.801	1.004	0.013	2.297	-0.0968	0.0125	-0.0000	0.0000	0.0048	0.0000	0.0002	0.142	0.0000	0.0048	6.8253	
220	0.802	1.519	0.011	2.300	-0.1175	0.0125	-0.0000	0.0000	0.0036	0.0002	0.0002	0.156	0.0036	0.0000	7.4826	
221	0.802	2.041	0.012	2.298	-0.1394	0.0126	-0.0001	0.0001	0.0024	0.0000	0.0001	0.171	0.0156	0.0000	7.4826	
222	0.801	2.540	0.012	2.297	-0.1610	0.0128	-0.0001	0.0001	0.0014	0.0000	0.0001	0.199	0.0199	0.0001	8.0419	
223	0.802	3.014	0.014	2.300	-0.1819	0.0131	-0.0001	0.0001	0.0007	0.0000	0.0003	0.1810	0.0226	0.0000	8.0050	
224	0.802	3.583	0.018	2.300	-0.2086	0.0137	-0.0001	0.0001	0.0009	0.0000	0.0003	0.188	0.0267	0.0001	7.7633	
225	0.802	4.024	0.023	2.301	-0.2296	0.0143	-0.0001	0.0001	0.0017	0.0001	0.0005	0.2280	0.0304	0.0008	7.4975	
226	0.751	-0.038	0.012	2.193	-0.0560	0.0122	-0.0001	0.0001	0.0069	0.0000	0.0001	0.122	0.0122	0.0000	4.5939	
227	0.752	-4.010	0.015	2.198	-0.0702	0.0082	-0.0004	0.0001	0.0112	0.0001	0.0003	0.144	0.0144	0.0000	6.1873	
228	0.752	-3.519	0.008	2.194	-0.0901	0.0081	-0.0004	0.0001	0.0112	0.0001	0.0003	0.0893	0.0132	0.0004	5.2645	
229	0.751	-3.005	0.018	2.194	-0.0508	0.0087	-0.0004	0.0001	0.0107	0.0001	0.0003	0.0695	0.0124	0.0017	4.0606	
230	0.751	-2.496	0.014	2.192	-0.0316	0.0104	-0.0003	0.0001	0.0099	0.0001	0.0002	0.0311	0.0118	0.0001	2.6432	
231	0.751	-2.005	0.014	2.192	-0.0139	0.0108	-0.0003	0.0000	0.0094	0.0000	0.0003	0.0135	0.0113	0.0004	1.1903	

Table IV. Continued

Run Point	M_∞	a	β	q_∞	C_N	C_A	C_I	C_m	C_y	C_D	C_L	C_{Ls}	C_{ms}	C_{ys}	L/D
12	232	0.751	-1.491	0.014	2.190	0.0052	0.0113	-0.0002	0.0088	0.0000	-0.0002	0.0088	0.0000	0.4933	
12	233	0.750	-1.000	0.014	2.187	0.0220	0.0117	-0.0002	0.0081	0.0000	-0.0001	0.0113	-0.0002	0.0081	0.0000
12	234	0.750	-0.495	0.014	2.193	0.0398	0.0121	-0.0002	0.0001	0.0001	-0.0118	0.0118	-0.0075	0.0000	1.9552
12	235	0.751	0.014	2.191	0.0564	0.0122	-0.0001	0.0068	0.0000	0.0002	0.0564	0.0122	-0.0001	0.0068	4.6265
12	236	0.751	0.519	0.014	2.194	0.0954	0.0124	0.0000	0.0000	0.0004	0.0952	0.0141	0.0000	0.0052	5.8224
12	237	0.750	1.026	0.014	2.188	0.0954	0.0124	0.0000	0.0001	0.0002	0.0759	0.0130	-0.0001	0.0060	6.7309
12	238	0.751	1.519	0.014	2.191	0.1154	0.0125	0.0000	0.0043	0.0000	0.1150	0.0156	0.0000	0.0043	7.3951
12	239	0.751	2.004	0.016	2.194	0.1348	0.0126	0.0001	0.0033	0.0003	0.1343	0.0173	0.0001	0.0033	7.7550
12	240	0.750	2.501	0.015	2.195	0.1558	0.0127	0.0001	0.0025	0.0003	0.1551	0.0195	0.0001	0.0025	7.9395
12	241	0.751	3.013	0.016	2.192	0.1780	0.0129	0.0001	0.0019	0.0004	0.1770	0.0223	0.0001	0.0019	7.9494
12	242	0.752	3.504	0.019	2.196	0.1996	0.0133	0.0002	0.0004	0.0000	0.1984	0.0255	0.0002	0.0020	7.7815
12	243	0.752	4.014	0.027	2.196	0.2246	0.0141	0.0008	0.0003	0.0003	0.2231	0.0298	0.0008	0.0030	8.4777
12	244	0.700	-4.000	0.027	2.075	-0.0884	0.0004	0.0105	0.0082	0.0004	0.0876	0.0117	0.0003	0.0096	2.6173
12	245	0.702	-3.502	0.010	2.083	-0.0687	0.0004	0.0102	0.0000	0.0004	0.0680	0.0132	0.0004	0.0102	5.1661
12	246	0.701	-2.978	0.016	2.078	-0.0488	0.0008	0.0103	0.0003	0.0004	0.0482	0.0124	0.0003	0.0100	3.8993
12	247	0.701	-2.499	0.016	2.081	-0.0311	0.0103	0.0001	0.0096	0.0000	0.0306	0.0117	0.0003	0.0096	0.0000
12	248	0.701	-2.010	0.016	2.078	-0.0139	0.0109	0.0001	0.0092	0.0000	0.0135	0.0114	0.0003	0.0092	1.1195
12	249	0.700	-1.500	0.015	2.073	0.0045	0.0113	0.0002	0.0087	0.0001	0.0124	0.0112	0.0002	0.0087	0.4286
12	250	0.701	-0.988	0.011	2.081	0.0222	0.0118	0.0002	0.0081	0.0000	0.0224	0.0114	0.0002	0.0081	1.9709
12	251	0.700	-0.514	0.015	2.075	0.0390	0.0121	0.0001	0.0076	0.0002	0.0391	0.0118	0.0001	0.0076	3.3268
12	252	0.701	0.030	0.014	2.080	0.0577	0.0123	0.0001	0.0069	0.0000	0.0577	0.0123	0.0001	0.0069	4.6928
12	253	0.700	0.511	0.015	2.076	0.0752	0.0124	0.0000	0.0063	0.0003	0.0751	0.0130	0.0000	0.0063	5.7583
12	254	0.701	0.990	0.012	2.077	0.0927	0.0124	0.0000	0.0056	0.0004	0.0925	0.0140	0.0000	0.0056	6.5982
12	255	0.701	1.496	0.011	2.077	0.1123	0.0125	0.0000	0.0049	0.0004	0.1120	0.0155	0.0000	0.0049	7.2469
12	256	0.702	2.042	0.012	2.082	0.1347	0.0126	0.0000	0.0127	0.0001	0.1341	0.0174	0.0000	0.0039	7.7256
12	257	0.701	2.511	0.012	2.080	0.1541	0.0127	0.0001	0.0032	0.0003	0.1534	0.0194	0.0001	0.0032	0.0000
12	258	0.701	3.023	0.013	2.078	0.1984	0.0133	0.0002	0.0008	0.0001	0.1972	0.0255	0.0002	0.0030	7.7302
12	259	0.701	3.548	0.017	2.078	0.1984	0.0133	0.0002	0.0008	0.0001	0.1972	0.0221	0.0001	0.0027	7.9099
12	260	0.701	4.011	0.022	2.079	0.2213	0.0140	0.0008	0.0040	0.0000	0.2198	0.0294	0.0008	0.0040	7.4644
12	261	0.601	4.008	0.016	1.837	0.0684	0.0094	0.0001	0.0097	0.0001	0.0856	0.0144	0.0004	0.0097	5.1149
12	262	0.601	-3.560	0.013	1.837	0.0690	0.0091	0.0004	0.0096	0.0001	0.0683	0.0134	0.0004	0.0096	5.9516
12	263	0.600	-3.034	0.015	1.832	0.0618	0.0104	0.0003	0.0094	0.0001	0.0617	0.0119	0.0003	0.0092	2.6746
12	264	0.601	-2.547	0.016	1.836	0.0322	0.0104	0.0008	0.0092	0.0000	0.0317	0.0114	0.0005	0.0090	1.3670
12	265	0.600	-2.086	0.015	1.834	0.0113	0.0020	0.0002	0.0086	0.0000	0.0156	0.0114	0.0004	0.0086	0.0000
12	266	0.600	-1.565	0.015	1.830	0.0118	0.0020	0.0002	0.0086	0.0000	0.0113	0.0113	0.0004	0.0086	0.0000
12	267	0.600	-1.082	0.017	1.830	0.0187	0.0020	0.0002	0.0082	0.0000	0.0115	0.0115	0.0004	0.0082	0.0000
12	268	0.600	-1.565	0.016	1.834	0.0113	0.0022	0.0002	0.0086	0.0000	0.0113	0.0113	0.0004	0.0086	1.6494

Table IV. Concluded

Run	Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_n	C_Y	C_L	C_D	C_{ls}	C_{ms}	C_{ns}	L/D
12	268	0.600	-0.499	0.012	1.834	0.0387	0.0121	-0.0001	0.0077	0.0001	-0.0003	0.0388	0.0118	-0.0001	0.0077	0.0001	3.2893
12	269	0.601	0.029	0.014	1.835	0.0568	0.0122	-0.0001	0.0071	0.0000	-0.0005	0.0568	0.0123	-0.0001	0.0071	0.0000	4.6336
12	270	0.600	0.529	0.013	1.834	0.0740	0.0124	-0.0001	0.0067	0.0000	-0.0004	0.0739	0.0131	-0.0001	0.0067	0.0000	5.6468
12	271	0.600	1.011	0.011	1.832	0.0918	0.0125	0.0000	0.0062	0.0000	-0.0003	0.0916	0.0141	0.0000	0.0062	0.0000	6.4856
12	272	0.600	1.501	0.013	1.831	0.1103	0.0124	0.0000	0.0056	0.0000	-0.0005	0.1099	0.0153	0.0000	0.0056	0.0000	7.1732
12	273	0.600	2.006	0.011	1.832	0.1302	0.0125	0.0000	0.0049	0.0000	-0.0005	0.1297	0.0171	0.0000	0.0049	0.0000	7.6059
12	274	0.600	2.510	0.013	1.832	0.1512	0.0126	0.0001	0.0043	0.0000	-0.0006	0.1505	0.0192	0.0001	0.0043	0.0000	7.8299
12	275	0.601	3.018	0.014	1.835	0.1716	0.0128	0.0002	0.0040	0.0000	-0.0004	0.1707	0.0218	0.0002	0.0040	0.0000	7.8381
12	276	0.600	3.498	0.015	1.834	0.1917	0.0130	0.0002	0.0042	0.0000	-0.0007	0.1905	0.0246	0.0002	0.0042	-0.0001	7.7318
12	277	0.600	4.036	0.022	1.834	0.2178	0.0138	0.0008	0.0056	0.0000	-0.0020	0.2163	0.0291	0.0008	0.0056	-0.0001	7.4394
12	278	0.303	-4.057	0.019	0.996	-0.0841	0.0084	-0.0005	0.0082	0.0000	-0.0011	-0.0833	0.0143	-0.0005	0.0082	0.0000	-5.8213
12	279	0.303	-3.523	0.018	0.994	-0.0644	0.0093	-0.0004	0.0084	0.0001	-0.0009	-0.0637	0.0133	-0.0004	0.0084	0.0001	-4.8013
12	280	0.303	-3.024	0.018	0.995	-0.0469	0.0097	-0.0004	0.0085	0.0000	-0.0012	-0.0463	0.0122	-0.0004	0.0085	0.0000	-3.8066
12	281	0.302	-2.581	0.019	0.993	-0.0316	0.0104	-0.0004	0.0085	0.0001	-0.0010	-0.0311	0.0119	-0.0004	0.0085	0.0001	-2.6223
12	282	0.302	-2.071	0.018	0.992	-0.0145	0.0110	-0.0003	0.0085	0.0001	-0.0008	-0.0141	0.0115	-0.0003	0.0085	0.0001	-1.2228
12	283	0.301	-1.585	0.017	0.988	0.0013	0.0113	-0.0003	0.0083	0.0001	-0.0009	0.0016	0.0113	-0.0003	0.0083	0.0001	0.1459
12	284	0.302	-1.044	0.018	0.991	0.0199	0.0118	-0.0002	0.0080	0.0000	-0.0010	0.0201	0.0114	-0.0002	0.0080	0.0000	1.7640
12	285	0.302	-0.514	0.018	0.991	0.0377	0.0121	-0.0002	0.0078	0.0001	-0.0009	0.0378	0.0117	-0.0002	0.0078	0.0001	3.2181
12	286	0.302	-0.013	0.018	0.990	0.0542	0.0122	-0.0002	0.0074	0.0000	-0.0015	0.0542	0.0122	-0.0002	0.0074	0.0000	4.4592
12	287	0.302	0.581	0.017	0.989	0.0752	0.0124	-0.0001	0.0071	0.0000	-0.0009	0.0751	0.0131	-0.0001	0.0071	0.0000	5.7126
12	288	0.302	1.012	0.018	0.990	0.0895	0.0123	-0.0001	0.0068	0.0000	-0.0014	0.0893	0.0139	-0.0001	0.0068	0.0000	6.4310
12	289	0.302	1.527	0.018	0.991	0.1092	0.0124	0.0000	0.0065	0.0000	-0.0010	0.1088	0.0153	0.0000	0.0065	0.0000	7.1248
12	290	0.302	2.095	0.018	0.989	0.1301	0.0123	0.0000	0.0059	0.0000	-0.0012	0.1296	0.0170	0.0000	0.0059	0.0000	7.6038
12	291	0.302	2.573	0.018	0.989	0.1483	0.0123	0.0001	0.0057	0.0000	-0.0010	0.1476	0.0190	0.0001	0.0057	0.0000	7.7716
12	292	0.302	3.048	0.019	0.989	0.1675	0.0124	0.0002	0.0056	0.0000	-0.0011	0.1666	0.0212	0.0002	0.0056	0.0000	7.8402
12	293	0.301	3.522	0.020	0.984	0.1860	0.0125	0.0002	0.0057	-0.0001	-0.0013	0.1849	0.0240	0.0002	0.0057	-0.0001	7.7204
12	294	0.301	4.001	0.020	0.987	0.2072	0.0132	0.0005	0.0067	-0.0001	-0.0016	0.2058	0.0276	0.0005	0.0067	-0.0001	7.4597

Table V. Force and Moment Data for the Straight Wing Tip Model

Run	Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_n	C_Y	C_L	C_D	C_{ls}	C_{ms}	C_{ns}	L/D
14	314	1.191	-1.522	-0.029	2.884	-0.0016	0.0155	-0.0003	0.0060	0.0001	-0.0001	-0.0012	0.0155	-0.0003	0.0060	0.0001	-0.0744
14	315	1.191	-1.016	-0.029	2.885	0.0167	0.0158	-0.0004	0.0042	0.0001	-0.0001	0.0170	0.0155	-0.0004	0.0042	0.0001	1.0948
14	316	1.191	-0.034	-0.029	2.885	0.0519	0.0164	-0.0004	0.0011	0.0001	-0.0002	0.0519	0.0164	-0.0004	0.0011	0.0001	3.1669
14	317	1.191	0.474	-0.031	2.886	0.0711	0.0167	-0.0004	-0.0005	0.0001	0.0000	0.0709	0.0173	-0.0004	-0.0005	0.0001	4.0960
14	318	1.191	0.983	-0.018	2.886	0.0909	0.0169	-0.0004	-0.0024	0.0001	-0.0001	0.0906	0.0185	-0.0004	-0.0024	0.0001	4.8974
14	319	1.191	1.990	-0.017	2.887	0.1315	0.0174	-0.0005	-0.0064	0.0001	-0.0003	0.1308	0.0219	-0.0005	-0.0064	0.0001	5.9634
14	320	1.191	3.481	-0.021	2.886	0.1939	0.0177	-0.0005	-0.0113	0.0002	-0.0002	0.1925	0.0295	-0.0004	-0.0113	0.0002	6.5335
14	321	1.191	4.492	-0.013	2.885	0.2393	0.0191	-0.0002	-0.0110	0.0000	-0.0002	0.2370	0.0378	-0.0002	-0.0110	0.0000	6.2754
14	322	1.191	6.489	-0.020	2.885	0.3266	0.0213	-0.0001	-0.0106	0.0002	-0.0006	0.3221	0.0580	-0.0001	-0.0106	0.0002	5.5514
14	323	1.191	7.478	-0.026	2.885	0.3685	0.0222	-0.0001	-0.0099	0.0002	-0.0006	0.3625	0.0700	-0.0001	-0.0099	0.0002	5.1798
14	324	1.099	-1.793	-0.020	2.785	-0.0097	0.0153	-0.0003	0.0099	0.0000	-0.0003	-0.0092	0.0156	-0.0003	0.0099	0.0000	-0.5917
14	325	1.099	-1.281	-0.022	2.784	0.0110	0.0159	-0.0003	0.0079	0.0001	-0.0002	0.0113	0.0157	-0.0003	0.0079	0.0001	0.7219
14	326	1.099	-0.284	-0.029	2.784	0.0494	0.0167	-0.0003	0.0040	0.0001	-0.0003	0.0495	0.0165	-0.0003	0.0040	0.0001	3.0051
14	327	1.099	0.186	-0.013	2.782	0.0686	0.0169	-0.0003	0.0020	0.0000	-0.0003	0.0685	0.0172	-0.0003	0.0020	0.0000	3.9925
14	328	1.099	0.746	-0.014	2.782	0.0922	0.0173	-0.0003	-0.0004	0.0001	-0.0001	0.0919	0.0185	-0.0003	-0.0004	0.0001	4.9720
14	329	1.099	1.710	-0.017	2.782	0.1333	0.0176	-0.0003	-0.0048	0.0001	-0.0003	0.1328	0.0216	-0.0003	-0.0048	0.0001	6.1496
14	330	1.099	3.242	-0.019	2.782	0.2024	0.0182	-0.0002	-0.0111	0.0001	-0.0003	0.2011	0.0296	-0.0002	-0.0111	0.0001	6.7933
14	331	1.099	4.208	-0.012	2.784	0.2485	0.0198	-0.0001	-0.0114	0.0000	-0.0006	0.2463	0.0379	-0.0001	-0.0114	0.0000	6.4941
14	332	1.099	6.209	-0.019	2.782	0.3405	0.0220	0.0000	-0.0118	0.0002	-0.0006	0.3361	0.0587	0.0000	-0.0118	0.0002	5.7291
14	333	1.099	7.206	-0.027	2.782	0.3856	0.0229	-0.0001	-0.0115	0.0002	-0.0007	0.3797	0.0711	0.0000	-0.0115	0.0002	5.3381
14	334	0.949	-1.806	-0.014	2.563	-0.0174	0.0103	-0.0004	0.0116	0.0001	-0.0004	-0.0170	0.0108	-0.0005	0.0116	0.0001	-1.5756
14	335	0.949	-1.296	-0.014	2.565	0.0037	0.0108	-0.0004	0.0100	0.0001	-0.0004	0.0040	0.0107	-0.0004	0.0100	0.0001	0.3713
14	336	0.949	-0.294	-0.026	2.564	0.0440	0.0117	-0.0004	0.0068	0.0001	-0.0003	0.0441	0.0115	-0.0004	0.0068	0.0001	3.8482
14	337	0.949	0.181	-0.025	2.563	0.0639	0.0119	-0.0004	0.0051	0.0001	-0.0003	0.0639	0.0121	-0.0004	0.0051	0.0001	5.2890
14	338	0.949	0.702	-0.016	2.565	0.0865	0.0120	-0.0004	0.0031	0.0001	-0.0004	0.0864	0.0131	-0.0004	0.0031	0.0001	6.5938
14	339	0.949	1.708	-0.019	2.564	0.1324	0.0124	-0.0005	-0.0012	0.0002	-0.0005	0.1320	0.0164	-0.0005	-0.0012	0.0002	8.0572
14	340	0.948	3.195	-0.022	2.562	0.2048	0.0134	-0.0004	-0.0076	0.0002	-0.0004	0.2037	0.0248	-0.0004	-0.0076	0.0003	8.2306
14	341	0.949	4.217	-0.016	2.564	0.2540	0.0152	-0.0002	-0.0072	0.0001	-0.0010	0.2522	0.0339	-0.0002	-0.0072	0.0001	7.4457
14	342	0.949	6.197	-0.024	2.565	0.3516	0.0182	0.0000	-0.0082	0.0002	-0.0007	0.3476	0.0561	0.0001	-0.0082	0.0002	6.1980
14	343	0.949	8.203	-0.030	2.563	0.4444	0.0213	-0.0003	-0.0062	0.0003	-0.0010	0.4368	0.0845	-0.0002	-0.0062	0.0003	5.1720
14	344	0.900	-1.815	-0.010	2.481	-0.0153	0.0104	-0.0004	0.0103	0.0000	-0.0002	-0.0150	0.0108	-0.0004	0.0103	0.0000	-1.3782
14	345	0.901	-1.302	-0.012	2.482	0.0045	0.0108	-0.0004	0.0092	0.0001	-0.0004	0.0048	0.0107	-0.0004	0.0092	0.0001	0.4455
14	346	0.903	-0.298	-0.013	2.489	0.0426	0.0117	-0.0004	0.0069	0.0001	-0.0004	0.0427	0.0115	-0.0004	0.0069	0.0001	3.7280
14	347	0.903	0.206	-0.016	2.489	0.0629	0.0120	-0.0004	0.0056	0.0001	-0.0005	0.0628	0.0122	-0.0004	0.0056	0.0001	5.1577
14	348	0.900	0.702	-0.015	2.480	0.0829	0.0120	-0.0004	0.0043	0.0001	-0.0003	0.0827	0.0130	-0.0004	0.0043	0.0001	6.3630
14	349	0.902	1.712	-0.013	2.484	0.1270	0.0123	-0.0005	0.0011	0.0002	-0.0005	0.1266	0.0161	-0.0005	0.0011	0.0002	7.8602

Table V. Continued

Run	Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_n	C_Y	C_L	C_D	C_{ls}	C_{ms}	C_{ns}	L/D
14	350	0.901	3.215	-0.022	2.483	0.1958	0.0129	-0.0005	-0.0033	0.0002	-0.0005	0.1948	0.0239	-0.0005	-0.0033	0.0002	8.1544
14	351	0.901	4.237	-0.013	2.482	0.2479	0.0144	-0.0001	-0.0031	0.0001	-0.0010	0.2461	0.0327	-0.0001	-0.0031	0.0001	7.5310
14	352	0.901	6.197	-0.021	2.482	0.3510	0.0171	-0.0003	-0.0038	0.0002	-0.0008	0.3471	0.0549	-0.0003	-0.0038	0.0003	6.3234
14	353	0.901	8.205	-0.023	2.482	0.4536	0.0197	-0.0002	-0.0038	0.0003	-0.0008	0.4461	0.0842	-0.0002	-0.0038	0.0003	5.2974
14	354	0.901	-1.838	5.022	2.482	-0.0257	0.0100	-0.0030	0.0107	0.0005	-0.0096	-0.0253	0.0108	-0.0030	0.0107	0.0004	-2.3491
14	355	0.901	-1.292	5.019	2.483	-0.0042	0.0106	-0.0037	0.0097	0.0007	-0.0098	-0.0040	0.0107	-0.0037	0.0097	0.0006	-0.3718
14	356	0.898	0.769	5.000	2.472	0.0765	0.0118	-0.0067	0.0053	0.0010	-0.0100	0.0764	0.0128	-0.0067	0.0053	0.0011	5.9570
14	357	0.903	0.258	5.012	2.490	0.0556	0.0116	-0.0059	0.0064	0.0008	-0.0098	0.0556	0.0119	-0.0059	0.0064	0.0008	4.6778
14	358	0.903	0.753	5.002	2.487	0.0758	0.0117	-0.0067	0.0053	0.0010	-0.0102	0.0756	0.0127	-0.0067	0.0053	0.0010	5.9395
14	359	0.905	1.780	4.980	2.494	0.1197	0.0120	-0.0085	0.0031	0.0011	-0.0097	0.1193	0.0157	-0.0084	0.0031	0.0013	7.5866
14	360	0.899	3.289	4.925	2.475	0.1885	0.0129	-0.0101	0.0003	0.0018	-0.0084	0.1875	0.0237	-0.0100	0.0003	0.0024	7.9108
14	361	0.903	4.292	4.864	2.489	0.2337	0.0135	-0.0105	-0.0007	0.0027	-0.0075	0.2320	0.0310	-0.0103	-0.0007	0.0035	7.4929
14	362	0.901	6.293	4.856	2.482	0.3277	0.0172	-0.0091	0.0032	0.0028	-0.0123	0.3239	0.0530	-0.0088	0.0032	0.0038	6.1079
14	363	0.900	8.326	4.813	2.481	0.4305	0.0198	-0.0110	0.0054	0.0020	-0.0111	0.4231	0.0819	-0.0106	0.0054	0.0035	5.1638
14	364	0.898	-1.809	-5.022	2.470	-0.0046	0.0107	0.0029	0.0096	-0.0006	0.0089	-0.0043	0.0108	0.0029	0.0096	-0.0005	-0.3925
14	365	0.901	-1.299	-5.022	2.480	0.0150	0.0111	0.0036	0.0086	-0.0006	0.0087	0.0152	0.0108	0.0036	0.0086	-0.0005	1.4130
14	366	0.903	-0.271	-5.030	2.490	0.0554	0.0118	0.0051	0.0063	-0.0007	0.0090	0.0555	0.0115	0.0051	0.0063	-0.0007	4.8060
14	367	0.901	0.234	-5.026	2.480	0.0749	0.0118	0.0058	0.0053	-0.0007	0.0090	0.0749	0.0121	0.0058	0.0053	-0.0008	6.1787
14	368	0.903	0.747	-5.010	2.490	0.0965	0.0119	0.0066	0.0041	-0.0009	0.0091	0.0964	0.0132	0.0066	0.0041	-0.0009	7.3201
14	369	0.901	1.770	-4.983	2.483	0.1426	0.0123	0.0083	0.0016	-0.0012	0.0088	0.1421	0.0167	0.0082	0.0016	-0.0015	8.4911
14	370	0.904	3.289	-4.925	2.493	0.2124	0.0134	0.0094	-0.0008	-0.0021	0.0076	0.2112	0.0256	0.0092	-0.0008	-0.0027	8.2481
14	371	0.900	4.279	-4.906	2.479	0.2563	0.0147	0.0088	-0.0001	-0.0023	0.0074	0.2545	0.0337	0.0086	-0.0001	-0.0030	7.5406
14	372	0.901	6.277	-4.912	2.480	0.3526	0.0181	0.0087	0.0046	-0.0020	0.0120	0.3485	0.0565	0.0084	0.0046	-0.0029	6.1689
14	373	0.903	8.333	-4.814	2.489	0.4661	0.0205	0.0135	0.0018	-0.0023	0.0118	0.4582	0.0878	0.0130	0.0018	-0.0042	5.2172
14	374	0.850	-1.816	-0.011	2.388	-0.0132	0.0105	-0.0004	0.0098	0.0001	-0.0007	-0.0128	0.0109	-0.0004	0.0098	0.0001	-1.1791
14	375	0.849	-1.306	-0.021	2.387	0.0062	0.0110	-0.0004	0.0089	0.0002	-0.0005	0.0064	0.0108	-0.0004	0.0089	0.0001	0.5917
14	376	0.848	-0.291	-0.023	2.383	0.0433	0.0118	-0.0004	0.0070	0.0001	-0.0004	0.0433	0.0115	-0.0004	0.0070	0.0001	3.7507
14	377	0.851	0.203	-0.024	2.394	0.0625	0.0120	-0.0004	0.0060	0.0001	-0.0002	0.0625	0.0122	-0.0004	0.0060	0.0001	5.1214
14	378	0.852	0.712	-0.013	2.396	0.0823	0.0121	-0.0004	0.0049	0.0001	-0.0001	0.0821	0.0131	-0.0004	0.0049	0.0001	6.2505
14	379	0.850	1.711	-0.017	2.389	0.1230	0.0123	-0.0005	0.0025	0.0002	0.0000	0.1225	0.0160	-0.0005	0.0025	0.0002	7.6601
14	380	0.852	3.216	-0.021	2.396	0.1914	0.0129	-0.0005	-0.0012	0.0002	0.0004	0.1904	0.0237	-0.0005	-0.0012	0.0002	8.0438
14	381	0.851	4.201	-0.014	2.393	0.2391	0.0143	-0.0001	-0.0005	0.0001	-0.0003	0.2374	0.0318	-0.0001	-0.0005	0.0001	7.4752
14	382	0.850	6.210	-0.023	2.390	0.3384	0.0170	-0.0003	0.0023	0.0002	0.0006	0.3346	0.0535	-0.0003	0.0023	0.0002	6.2514
14	383	0.850	8.220	-0.030	2.391	0.4351	0.0195	0.0001	0.0068	0.0002	0.0011	0.4279	0.0815	0.0001	0.0068	0.0001	5.2483
14	384	0.850	9.215	-0.032	2.391	0.4806	0.0209	0.0000	0.0107	0.0002	0.0011	0.4710	0.0976	0.0000	0.0107	0.0002	4.8278
14	385	0.802	-1.811	-0.011	2.299	-0.0124	0.0106	-0.0004	0.0095	0.0001	-0.0006	-0.0121	0.0110	-0.0004	0.0095	0.0001	-1.1017

Table V. Continued

Run Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_n	C_Y	C_L	C_D	C_{ls}	C_{ms}	C_{ns}	L/D	
14	386	0.802	-1.293	-0.015	2.298	0.0067	0.0111	-0.0004	0.0087	0.0001	-0.0005	0.0069	0.0109	-0.0004	0.0087	0.0001	0.6369
14	387	0.802	-0.313	-0.021	2.302	0.0415	0.0118	-0.0004	0.0072	0.0001	-0.0004	0.0416	0.0116	-0.0004	0.0072	0.0001	3.5940
14	388	0.802	-0.303	-0.008	2.300	0.0420	0.0118	-0.0004	0.0072	0.0001	-0.0004	0.0420	0.0115	-0.0004	0.0072	0.0001	3.6398
14	389	0.802	0.183	-0.009	2.298	0.0600	0.0120	-0.0004	0.0064	0.0002	-0.0004	0.0599	0.0122	-0.0004	0.0064	0.0002	4.9257
14	390	0.804	0.706	-0.006	2.308	0.0799	0.0120	-0.0004	0.0054	0.0001	-0.0003	0.0797	0.0130	-0.0004	0.0054	0.0001	6.1226
14	391	0.800	1.703	-0.011	2.292	0.1201	0.0122	-0.0005	0.0034	0.0002	-0.0003	0.1197	0.0158	-0.0005	0.0034	0.0002	7.5727
14	392	0.801	3.195	-0.016	2.299	0.1851	0.0128	-0.0005	0.0005	0.0002	0.0003	0.1841	0.0231	-0.0004	0.0005	0.0003	7.9673
14	393	0.803	4.255	-0.007	2.303	0.2352	0.0142	-0.0001	0.0016	0.0001	-0.0006	0.2335	0.0316	-0.0001	0.0016	0.0001	7.3872
14	396	0.803	8.246	-0.018	2.304	0.4247	0.0195	0.0001	0.0121	0.0002	0.0009	0.4175	0.0802	0.0001	0.0121	0.0002	5.2073
14	397	0.802	10.221	-0.019	2.299	0.5145	0.0223	0.0001	0.0211	0.0002	0.0012	0.5024	0.1132	0.0001	0.0211	0.0002	4.4363
14	398	0.803	-1.808	5.041	2.303	-0.0214	0.0103	-0.0029	0.0096	0.0007	-0.0099	-0.0211	0.0109	-0.0029	0.0096	0.0006	-1.9236
14	399	0.803	-1.294	5.038	2.303	-0.0028	0.0108	-0.0035	0.0091	0.0007	-0.0097	-0.0025	0.0109	-0.0035	0.0091	0.0007	-0.2346
14	400	0.802	-0.277	5.031	2.298	0.0339	0.0116	-0.0048	0.0077	0.0009	-0.0098	0.0340	0.0114	-0.0048	0.0077	0.0008	2.9758
14	401	0.800	0.234	5.028	2.293	0.0520	0.0117	-0.0055	0.0070	0.0009	-0.0098	0.0519	0.0119	-0.0055	0.0070	0.0009	4.3726
14	402	0.802	0.734	5.021	2.297	0.0706	0.0118	-0.0063	0.0064	0.0010	-0.0098	0.0705	0.0127	-0.0063	0.0064	0.0011	5.5461
14	403	0.802	1.755	5.000	2.300	0.1117	0.0120	-0.0080	0.0051	0.0013	-0.0100	0.1113	0.0154	-0.0080	0.0051	0.0015	7.2349
14	404	0.803	3.277	4.944	2.303	0.1773	0.0127	-0.0099	0.0036	0.0021	-0.0084	0.1763	0.0228	-0.0098	0.0036	0.0027	7.7216
14	405	0.802	4.269	4.900	2.297	0.2209	0.0134	-0.0105	0.0035	0.0029	-0.0076	0.2193	0.0298	-0.0102	0.0035	0.0037	7.3587
14	406	0.802	6.322	4.862	2.300	0.3161	0.0166	-0.0110	0.0084	0.0033	-0.0121	0.3124	0.0513	-0.0106	0.0084	0.0045	6.0884
14	407	0.803	8.359	4.811	2.302	0.4145	0.0193	-0.0137	0.0142	0.0026	-0.0126	0.4073	0.0793	-0.0132	0.0142	0.0046	5.1347
14	408	0.801	-1.804	-5.036	2.297	-0.0026	0.0109	0.0028	0.0090	-0.0005	0.0085	-0.0023	0.0110	0.0028	0.0090	-0.0004	-0.2086
14	409	0.802	-1.288	-5.032	2.298	0.0162	0.0113	0.0034	0.0082	-0.0006	0.0084	0.0165	0.0109	0.0034	0.0082	-0.0005	1.5026
14	410	0.801	-0.270	-5.028	2.297	0.0527	0.0118	0.0048	0.0069	-0.0007	0.0087	0.0527	0.0116	0.0048	0.0069	-0.0007	4.5509
14	411	0.801	0.226	-5.022	2.296	0.0717	0.0118	0.0055	0.0062	-0.0007	0.0087	0.0716	0.0121	0.0055	0.0062	-0.0008	5.9241
14	412	0.804	0.749	-5.016	2.306	0.0915	0.0119	0.0062	0.0055	-0.0009	0.0086	0.0914	0.0131	0.0062	0.0055	-0.0010	6.9547
14	413	0.802	1.760	-4.994	2.301	0.1338	0.0123	0.0078	0.0042	-0.0012	0.0084	0.1333	0.0164	0.0078	0.0042	-0.0015	8.1341
14	414	0.801	3.269	-4.938	2.296	0.1997	0.0132	0.0093	0.0032	-0.0021	0.0071	0.1986	0.0245	0.0091	0.0032	-0.0027	8.1009
14	415	0.801	4.265	-4.913	2.296	0.2434	0.0142	0.0095	0.0041	-0.0024	0.0065	0.2416	0.0322	0.0093	0.0041	-0.0031	7.5019
14	416	0.801	6.301	-4.889	2.296	0.3420	0.0175	0.0116	0.0097	-0.0022	0.0124	0.3381	0.0550	0.0113	0.0097	-0.0034	6.1512
14	417	0.802	8.328	-4.808	2.299	0.4380	0.0200	0.0144	0.0153	-0.0023	0.0120	0.4305	0.0832	0.0139	0.0153	-0.0044	5.1715
17	440	0.749	-1.991	-0.010	2.184	-0.0201	0.0109	-0.0004	0.0094	0.0001	-0.0002	-0.0197	0.0116	-0.0004	0.0094	0.0000	-1.6931
17	441	0.749	-1.485	-0.012	2.185	-0.0020	0.0113	-0.0004	0.0089	0.0001	-0.0001	-0.0017	0.0114	-0.0004	0.0089	0.0001	-0.1467
17	442	0.748	-0.501	-0.032	2.179	0.0327	0.0122	-0.0004	0.0077	0.0001	0.0002	0.0328	0.0119	-0.0004	0.0077	0.0001	2.7485
17	443	0.748	0.003	-0.029	2.178	0.0507	0.0124	-0.0004	0.0070	0.0001	0.0001	0.0507	0.0124	-0.0004	0.0070	0.0001	4.0933
17	444	0.750	0.490	-0.026	2.186	0.0693	0.0125	-0.0004	0.0063	0.0001	0.0003	0.0692	0.0131	-0.0004	0.0063	0.0001	5.2735
17	445	0.748	1.502	-0.029	2.178	0.1076	0.0127	-0.0005	0.0047	0.0001	0.0004	0.1073	0.0155	-0.0005	0.0047	0.0002	6.9089

Table V. Continued

Run Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_n	C_Y	C_L	C_D	C_{ls}	C_{ms}	C_{ns}	L/D	
17	446	0.746	2.997	-0.031	2.173	0.1705	0.0129	-0.0005	0.0020	0.0002	0.0006	0.1696	0.0218	-0.0005	0.0020	0.0002	7.7637
17	447	0.750	4.008	-0.027	2.186	0.2180	0.0140	0.0001	0.0025	0.0002	-0.0001	0.2165	0.0292	0.0001	0.0025	0.0002	7.4052
17	448	0.749	5.912	-0.032	2.181	0.3066	0.0169	-0.0004	0.0083	0.0002	0.0009	0.3033	0.0483	-0.0003	0.0083	0.0002	6.2731
17	449	0.749	8.034	-0.033	2.185	0.4061	0.0195	-0.0001	0.0147	0.0002	0.0011	0.3994	0.0761	-0.0001	0.0147	0.0002	5.2517
17	450	0.749	10.029	-0.038	2.183	0.4974	0.0224	0.0000	0.0239	0.0002	0.0015	0.4859	0.1087	0.0000	0.0239	0.0002	4.4721
17	451	0.702	-2.098	-0.016	2.080	-0.0226	0.0108	-0.0004	0.0094	0.0001	-0.0004	-0.0222	0.0117	-0.0004	0.0094	0.0001	-1.9031
17	452	0.702	-1.525	-0.015	2.079	-0.0025	0.0112	-0.0004	0.0089	0.0001	-0.0005	-0.0022	0.0113	-0.0004	0.0089	0.0001	-0.1989
17	453	0.702	-0.522	-0.027	2.081	0.0322	0.0121	-0.0004	0.0078	0.0001	-0.0004	0.0324	0.0118	-0.0004	0.0078	0.0001	2.7315
17	454	0.702	-0.089	-0.015	2.080	0.0468	0.0123	-0.0004	0.0073	0.0001	-0.0003	0.0469	0.0122	-0.0004	0.0073	0.0001	3.8403
17	455	0.701	0.519	-0.017	2.077	0.0695	0.0124	-0.0004	0.0065	0.0001	-0.0001	0.0694	0.0131	-0.0004	0.0065	0.0001	5.3171
17	456	0.702	1.486	-0.017	2.080	0.1059	0.0125	-0.0005	0.0052	0.0001	-0.0001	0.1055	0.0153	-0.0005	0.0052	0.0001	6.9150
17	457	0.701	3.029	-0.021	2.076	0.1698	0.0128	-0.0005	0.0028	0.0002	0.0003	0.1689	0.0218	-0.0005	0.0028	0.0002	7.7478
17	458	0.701	4.016	-0.019	2.076	0.2143	0.0137	0.0001	0.0034	0.0002	-0.0001	0.2128	0.0287	0.0001	0.0034	0.0002	7.4179
17	459	0.701	5.992	-0.026	2.075	0.3061	0.0168	-0.0004	0.0104	0.0002	0.0008	0.3027	0.0487	-0.0004	0.0104	0.0002	6.2200
17	460	0.703	8.006	-0.029	2.083	0.4008	0.0193	-0.0002	0.0166	0.0002	0.0011	0.3942	0.0750	-0.0001	0.0166	0.0002	5.2586
17	461	0.702	10.002	-0.032	2.081	0.4922	0.0221	-0.0001	0.0261	0.0002	0.0012	0.4809	0.1073	0.0000	0.0261	0.0002	4.4828
17	462	0.701	-2.015	5.084	2.075	-0.0282	0.0105	-0.0026	0.0094	0.0006	-0.0098	-0.0278	0.0115	-0.0026	0.0094	0.0005	-2.4231
17	463	0.702	-1.493	5.085	2.081	-0.0097	0.0110	-0.0032	0.0091	0.0007	-0.0097	-0.0094	0.0113	-0.0032	0.0091	0.0006	-0.8309
17	464	0.702	-0.475	5.079	2.081	0.0252	0.0117	-0.0045	0.0081	0.0008	-0.0098	0.0253	0.0115	-0.0045	0.0081	0.0008	2.1969
17	465	0.702	0.035	5.076	2.078	0.0430	0.0120	-0.0052	0.0077	0.0009	-0.0096	0.0430	0.0120	-0.0052	0.0077	0.0009	3.5705
17	466	0.702	0.540	5.069	2.081	0.0616	0.0122	-0.0059	0.0072	0.0010	-0.0097	0.0614	0.0128	-0.0059	0.0072	0.0010	4.8038
17	467	0.701	1.555	5.052	2.076	0.0992	0.0122	-0.0075	0.0065	0.0012	-0.0096	0.0988	0.0149	-0.0075	0.0065	0.0014	6.6235
17	468	0.702	3.066	5.006	2.078	0.1612	0.0128	-0.0096	0.0058	0.0019	-0.0082	0.1603	0.0214	-0.0095	0.0058	0.0024	7.4822
17	469	0.702	4.085	4.958	2.080	0.2050	0.0133	-0.0106	0.0056	0.0029	-0.0071	0.2035	0.0279	-0.0103	0.0056	0.0036	7.2998
17	470	0.701	6.081	4.894	2.077	0.2923	0.0151	-0.0116	0.0094	0.0035	-0.0064	0.2890	0.0460	-0.0112	0.0094	0.0047	6.2837
17	471	0.702	8.120	4.880	2.082	0.3898	0.0191	-0.0130	0.0187	0.0026	-0.0125	0.3832	0.0739	-0.0125	0.0187	0.0044	5.1817
17	472	0.703	10.142	4.781	2.083	0.4831	0.0219	-0.0158	0.0280	0.0032	-0.0112	0.4717	0.1066	-0.0150	0.0280	0.0059	4.4242
17	473	0.701	-2.000	-5.064	2.077	-0.0096	0.0112	0.0025	0.0089	-0.0005	0.0088	-0.0092	0.0115	0.0025	0.0089	-0.0004	-0.7999
17	474	0.703	-1.479	-5.061	2.082	0.0086	0.0116	0.0031	0.0085	-0.0006	0.0086	0.0089	0.0114	0.0031	0.0085	-0.0005	0.7837
17	475	0.702	-0.503	-5.057	2.078	0.0425	0.0121	0.0043	0.0075	-0.0007	0.0087	0.0426	0.0118	0.0043	0.0075	-0.0007	3.6219
17	476	0.702	0.112	-5.054	2.077	0.0648	0.0122	0.0051	0.0069	-0.0008	0.0088	0.0648	0.0124	0.0051	0.0069	-0.0008	5.2422
17	477	0.702	0.542	-5.050	2.078	0.0805	0.0123	0.0057	0.0065	-0.0009	0.0087	0.0804	0.0131	0.0057	0.0065	-0.0009	6.1563
17	478	0.701	1.566	-5.027	2.075	0.1203	0.0124	0.0073	0.0058	-0.0012	0.0082	0.1199	0.0157	0.0072	0.0058	-0.0014	7.6434
17	479	0.701	3.114	-4.979	2.076	0.1858	0.0132	0.0090	0.0053	-0.0021	0.0070	0.1848	0.0233	0.0089	0.0053	-0.0026	7.9225
17	480	0.702	4.139	-4.950	2.079	0.2298	0.0140	0.0097	0.0061	-0.0025	0.0063	0.2282	0.0306	0.0095	0.0061	-0.0032	7.4591
17	481	0.702	6.159	-4.919	2.081	0.3236	0.0173	0.0114	0.0127	-0.0027	0.0119	0.3198	0.0519	0.0110	0.0127	-0.0039	6.1587

Table V. Continued

Run	Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_n	C_Y	C_L	C_D	C_{ls}	C_{ms}	C_{ns}	L/D
17	482	0.701	8.102	-4.875	2.077	0.4126	0.0198	0.0132	0.0207	-0.0023	0.0120	0.4057	0.0778	0.0127	0.0207	-0.0041	5.2151
17	483	0.703	10.142	-4.776	2.082	0.5086	0.0229	0.0159	0.0309	-0.0028	0.0106	0.4966	0.1121	0.0151	0.0309	-0.0056	4.4311
17	484	0.600	-2.006	-0.011	1.831	-0.0197	0.0109	-0.0004	0.0091	0.0001	-0.0007	-0.0193	0.0116	-0.0004	0.0091	0.0001	-1.6647
17	485	0.600	-1.503	-0.013	1.831	-0.0022	0.0113	-0.0004	0.0088	0.0001	-0.0006	-0.0019	0.0114	-0.0004	0.0088	0.0001	-0.1666
17	486	0.600	-0.530	-0.020	1.830	0.0316	0.0122	-0.0004	0.0080	0.0001	-0.0003	0.0317	0.0119	-0.0004	0.0080	0.0001	2.6714
17	487	0.600	-0.013	-0.019	1.831	0.0487	0.0123	-0.0004	0.0075	0.0001	-0.0004	0.0487	0.0123	-0.0004	0.0075	0.0001	3.9593
17	488	0.599	0.505	-0.023	1.828	0.0671	0.0124	-0.0004	0.0070	0.0001	-0.0004	0.0670	0.0130	-0.0004	0.0070	0.0001	5.1608
17	489	0.600	1.502	-0.026	1.830	0.1041	0.0126	-0.0005	0.0059	0.0001	-0.0001	0.1037	0.0153	-0.0005	0.0059	0.0001	6.7684
17	490	0.601	3.004	-0.028	1.837	0.1651	0.0128	-0.0005	0.0041	0.0002	0.0002	0.1642	0.0215	-0.0004	0.0041	0.0002	7.6541
17	491	0.599	4.023	-0.027	1.826	0.2094	0.0135	0.0000	0.0047	0.0002	0.0001	0.2079	0.0281	0.0000	0.0047	0.0002	7.3949
17	492	0.600	6.053	-0.031	1.832	0.3019	0.0167	-0.0003	0.0131	0.0002	0.0008	0.2985	0.0484	-0.0003	0.0131	0.0002	6.1618
17	493	0.601	8.056	-0.032	1.838	0.3950	0.0192	-0.0002	0.0202	0.0003	0.0009	0.3884	0.0744	-0.0002	0.0202	0.0003	5.2237
17	494	0.600	8.047	-0.034	1.832	0.3959	0.0192	-0.0002	0.0203	0.0002	0.0010	0.3894	0.0744	-0.0002	0.0203	0.0003	5.2297
17	495	0.600	9.999	-0.033	1.834	0.4850	0.0220	0.0000	0.0303	0.0003	0.0013	0.4739	0.1059	0.0000	0.0303	0.0003	4.4767
17	496	0.301	-2.013	5.040	0.985	-0.0291	0.0106	-0.0023	0.0088	0.0007	-0.0098	-0.0287	0.0117	-0.0023	0.0088	0.0006	-2.4673
17	497	0.301	-1.013	5.042	0.984	0.0041	0.0114	-0.0034	0.0086	0.0007	-0.0098	0.0043	0.0113	-0.0034	0.0086	0.0007	0.3762
17	498	0.301	-0.031	5.040	0.983	0.0369	0.0119	-0.0046	0.0082	0.0008	-0.0094	0.0369	0.0119	-0.0046	0.0082	0.0008	3.0922
17	499	0.300	2.055	5.018	0.980	0.1092	0.0124	-0.0075	0.0081	0.0015	-0.0079	0.1087	0.0163	-0.0075	0.0081	0.0018	6.6844
17	500	0.301	4.045	4.974	0.984	0.1878	0.0130	-0.0100	0.0090	0.0029	-0.0050	0.1864	0.0262	-0.0098	0.0090	0.0036	7.1246
17	501	0.300	6.070	4.926	0.978	0.2728	0.0143	-0.0116	0.0128	0.0041	-0.0020	0.2698	0.0431	-0.0111	0.0128	0.0053	6.2615
17	502	0.301	8.067	4.914	0.982	0.3641	0.0185	-0.0126	0.0252	0.0032	-0.0095	0.3579	0.0694	-0.0121	0.0252	0.0050	5.1596
17	503	0.300	10.068	4.862	0.979	0.4565	0.0209	-0.0155	0.0370	0.0034	-0.0100	0.4458	0.1004	-0.0146	0.0370	0.0060	4.4399
17	504	0.301	12.130	4.783	0.983	0.5499	0.0238	-0.0185	0.0518	0.0044	-0.0087	0.5326	0.1389	-0.0172	0.0518	0.0082	3.8354
17	505	0.301	14.152	4.718	0.982	0.6397	0.0267	-0.0195	0.0698	0.0049	-0.0067	0.6138	0.1823	-0.0177	0.0698	0.0095	3.3663
17	506	0.301	16.112	4.637	0.982	0.7310	0.0299	-0.0209	0.0881	0.0057	-0.0035	0.6940	0.2315	-0.0185	0.0881	0.0113	2.9973
17	507	0.300	18.149	4.539	0.980	0.8306	0.0332	-0.0229	0.1074	0.0068	-0.0004	0.7789	0.2903	-0.0196	0.1074	0.0136	2.6831
17	508	0.300	-2.026	-0.046	0.978	-0.0215	0.0111	-0.0004	0.0089	0.0001	-0.0006	-0.0211	0.0119	-0.0004	0.0089	0.0001	-1.7747
17	509	0.300	-0.989	-0.045	0.981	0.0132	0.0119	-0.0004	0.0085	0.0001	-0.0005	0.0134	0.0117	-0.0004	0.0085	0.0001	1.1438
17	510	0.300	0.017	-0.045	0.978	0.0461	0.0123	-0.0004	0.0079	0.0001	-0.0006	0.0461	0.0123	-0.0004	0.0079	0.0001	3.7455
17	511	0.300	2.049	-0.045	0.981	0.1180	0.0126	-0.0005	0.0065	0.0001	-0.0010	0.1175	0.0168	-0.0005	0.0065	0.0001	6.9919
17	512	0.300	4.061	-0.051	0.981	0.2000	0.0132	-0.0001	0.0066	0.0002	-0.0008	0.1985	0.0274	0.0000	0.0066	0.0002	7.2575
17	513	0.300	5.996	-0.049	0.979	0.2872	0.0166	0.0001	0.0159	-0.0001	-0.0002	0.2839	0.0465	0.0001	0.0159	-0.0001	6.1046
17	514	0.300	8.007	-0.052	0.979	0.3771	0.0188	-0.0001	0.0245	0.0003	-0.0007	0.3708	0.0712	-0.0001	0.0245	0.0003	5.2098
17	515	0.300	10.098	-0.052	0.979	0.4720	0.0216	0.0000	0.0365	0.0003	-0.0007	0.4609	0.1040	0.0000	0.0365	0.0003	4.4306
17	516	0.300	12.031	-0.051	0.976	0.5568	0.0243	-0.0001	0.0521	0.0002	-0.0007	0.5395	0.1398	0.0000	0.0521	0.0002	3.8586
17	517	0.299	13.995	-0.048	0.975	0.6449	0.0270	0.0000	0.0685	0.0001	-0.0006	0.6192	0.1822	0.0001	0.0685	0.0001	3.3985

Table V. Concluded

Run	Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_n	C_Y	C_L	C_D	C_{ls}	C_{ms}	C_{ns}	L/D
17	518	0.300	16.002	-0.049	0.978	0.7410	0.0302	-0.0002	0.0861	0.0001	-0.0015	0.7039	0.2333	-0.0002	0.0861	0.0001	3.0176
17	519	0.300	17.995	-0.050	0.979	0.8377	0.0333	-0.0004	0.1041	0.0001	-0.0016	0.7864	0.2905	-0.0003	0.1041	0.0002	2.7072
17	520	0.300	-2.001	-5.035	0.981	-0.0130	0.0114	0.0020	0.0086	-0.0005	0.0084	-0.0126	0.0118	0.0020	0.0086	-0.0004	-1.0668
17	521	0.300	-1.024	-5.035	0.980	0.0193	0.0121	0.0031	0.0083	-0.0006	0.0080	0.0196	0.0117	0.0031	0.0083	-0.0006	1.6712
17	522	0.300	-0.022	-5.033	0.976	0.0533	0.0124	0.0043	0.0079	-0.0008	0.0080	0.0533	0.0124	0.0043	0.0079	-0.0008	4.3011
17	523	0.300	2.075	-5.011	0.981	0.1295	0.0126	0.0074	0.0080	-0.0015	0.0061	0.1290	0.0173	0.0073	0.0080	-0.0018	7.4435
17	524	0.300	4.064	-4.974	0.977	0.2098	0.0136	0.0092	0.0094	-0.0028	0.0038	0.2083	0.0284	0.0090	0.0094	-0.0035	7.3227
17	525	0.300	6.087	-4.931	0.979	0.2965	0.0154	0.0121	0.0156	-0.0034	0.0020	0.2932	0.0468	0.0117	0.0156	-0.0046	6.2669
17	526	0.300	8.078	-4.890	0.978	0.3871	0.0191	0.0133	0.0270	-0.0045	0.0080	0.3805	0.0733	0.0125	0.0270	-0.0063	5.1941
17	527	0.300	10.153	-4.862	0.977	0.4839	0.0223	0.0160	0.0411	-0.0028	0.0100	0.4724	0.1072	0.0152	0.0411	-0.0056	4.4060
17	528	0.300	12.115	-4.796	0.979	0.5713	0.0248	0.0181	0.0559	-0.0035	0.0082	0.5534	0.1441	0.0169	0.0559	-0.0072	3.8391
17	529	0.300	14.086	-4.734	0.978	0.6601	0.0279	0.0182	0.0740	-0.0042	0.0054	0.6335	0.1877	0.0167	0.0740	-0.0085	3.3756
17	530	0.300	16.131	-4.644	0.977	0.7591	0.0312	0.0203	0.0926	-0.0053	0.0027	0.7206	0.2409	0.0180	0.0926	-0.0107	2.9915

Run Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_d	C_L	C_D	C_m	C_s	C_u	C_n	L/D
19	550	1.191	-1.719	-0.023	2.886	-0.0297	0.0095	-0.0003	0.0128	0.0000	0.0000	0.0004	0.0104	-0.0004	-2.8333	
19	551	1.190	-1.236	-0.022	2.887	-0.0119	0.0098	-0.0003	0.0110	0.0000	0.0000	0.0004	0.0104	-0.0004	-1.1640	
19	552	1.190	-0.255	-0.028	2.889	-0.0098	-0.0004	0.0227	0.0105	0.0000	0.0000	0.0001	0.0227	0.0104	0.0000	2.1809
19	553	1.190	0.339	-0.029	2.887	0.0433	0.0004	-0.0109	0.0128	0.0000	0.0000	0.0064	0.0000	0.0049	0.0148	3.8854
19	554	1.190	0.780	-0.029	2.888	0.0596	0.0111	-0.0004	0.0064	0.0000	0.0000	0.0049	0.0000	0.0049	0.0148	5.0148
19	555	1.190	1.190	-0.034	2.886	0.0990	0.0112	-0.0004	0.0044	0.0000	0.0000	0.0004	0.0004	0.0004	0.0000	6.8822
19	556	1.190	1.788	-0.031	2.886	0.0990	0.0111	-0.0004	0.0011	0.0000	0.0000	0.0003	0.0003	0.0003	0.0001	7.7631
19	557	1.190	4.289	-0.032	2.887	0.2046	0.0123	-0.0005	0.0005	0.0000	0.0000	0.0041	0.0000	0.0041	0.0000	7.3688
19	558	1.190	6.289	-0.032	2.888	0.2929	0.0144	-0.0004	0.0004	0.0000	0.0000	0.0004	0.0004	0.0005	0.0005	7.7631
19	559	1.190	8.324	-0.036	2.888	0.3789	0.0144	-0.0004	0.0004	0.0000	0.0000	0.0004	0.0004	0.0004	0.0000	6.2442
19	560	1.190	-2.011	-0.013	2.786	-0.0423	0.0092	-0.0002	0.0162	0.0001	0.0001	0.0420	0.0106	0.0002	0.0002	3.9461
19	561	1.190	-1.516	-0.021	2.785	-0.0218	0.0096	-0.0002	0.0142	0.0000	0.0000	0.0216	0.0102	0.0002	0.0002	5.2741
19	562	1.190	-1.512	-0.016	2.784	0.1005	0.0112	-0.0002	0.0002	0.0001	0.0001	0.0573	0.0114	0.0002	0.0002	5.0268
19	563	1.190	0.489	-0.016	2.785	0.0574	0.0126	-0.0003	0.0002	0.0001	0.0001	0.047	0.0114	0.0003	0.0003	7.2265
19	564	1.190	0.489	-0.016	2.785	0.1019	0.0126	-0.0003	0.0001	0.0001	0.0001	0.2140	0.0276	0.0001	0.0001	7.7558
19	565	1.190	3.996	-0.014	2.785	0.2154	0.0126	-0.0003	0.0001	0.0001	0.0001	0.466	0.0276	0.0001	0.0001	6.5384
19	567	1.190	3.996	-0.014	2.785	0.1014	0.0126	-0.0003	0.0001	0.0001	0.0001	0.2140	0.0276	0.0001	0.0001	7.7558
19	568	1.190	5.989	-0.019	2.785	0.3080	0.0146	-0.0003	0.0001	0.0001	0.0001	0.3048	0.0466	0.0001	0.0001	6.5384
19	569	1.190	8.029	-0.018	2.784	0.3983	0.0162	-0.0002	0.0002	0.0001	0.0001	0.3922	0.0716	0.0002	0.0001	5.4750
19	570	0.950	-2.062	-0.011	2.565	-0.0451	0.0068	-0.0003	0.0003	0.0001	0.0001	0.0004	0.0004	0.0002	0.0001	5.3342
19	571	0.952	-1.489	-0.015	2.569	-0.0214	0.0074	-0.0004	0.0003	0.0001	0.0001	0.0448	0.0084	0.0003	0.0139	0.0000
19	572	0.951	-0.517	-0.022	2.568	-0.0217	0.0074	-0.0004	0.0003	0.0001	0.0001	0.079	0.0212	0.0003	0.0125	-2.6758
19	573	0.951	0.038	-0.024	2.566	-0.0392	0.0085	-0.0003	0.0003	0.0001	0.0001	0.083	0.0003	0.0000	0.0000	2.2089
19	574	0.951	0.487	-0.023	2.568	-0.0572	0.0086	-0.0003	0.0003	0.0001	0.0001	0.0572	0.0091	0.0003	0.0070	0.0000
19	575	0.951	1.503	-0.023	2.566	-0.1006	0.0088	-0.0004	0.0004	0.0003	0.0003	0.1003	0.0114	0.0004	0.0039	0.0000
19	576	0.951	3.029	-0.024	2.565	-0.1733	0.0092	-0.0004	0.0004	0.0001	0.0001	0.1725	0.0184	0.0004	0.0018	0.0001
19	577	0.951	4.078	-0.020	2.566	-0.2270	0.0108	-0.0004	0.0004	0.0001	0.0001	0.2270	0.026	0.0002	0.0001	9.3895
19	578	0.950	5.989	-0.029	2.568	-0.4235	0.0158	-0.0005	0.0005	0.0001	0.0001	0.4235	0.0472	0.0002	0.0047	0.0001
19	579	0.951	8.070	-0.032	2.568	-0.134	0.0047	-0.0002	0.0002	0.0001	0.0001	0.134	0.0472	0.0002	0.0047	0.0001
20	580	0.900	-0.031	-0.029	2.479	-0.0342	0.0086	-0.0003	0.0003	0.0000	0.0000	0.0342	0.0086	-0.0003	0.0003	3.9866
20	581	0.901	-1.509	-0.023	2.482	-0.0221	0.0075	-0.0005	0.0005	0.0001	0.0001	0.0221	0.019	0.0003	0.0117	-2.7313
20	582	0.901	-0.013	-0.027	2.474	-0.0163	0.0084	-0.0003	0.0003	0.0001	0.0001	0.0163	0.0082	-0.0003	0.0003	1.9866
20	583	0.901	-0.518	-0.027	2.474	-0.0221	0.0075	-0.0005	0.0005	0.0001	0.0001	0.0221	0.019	0.0003	0.0097	0.0000
20	584	0.901	-2.010	-0.013	2.484	-0.0417	0.0071	-0.0002	0.0002	0.0000	0.0000	0.0415	0.0085	-0.0002	0.0002	4.4864
20	585	0.901	-1.509	-0.013	2.482	-0.0417	0.0071	-0.0002	0.0002	0.0001	0.0001	0.0417	0.0171	0.0002	0.0002	5.5548
20	586	0.898	-0.518	-0.023	2.482	-0.0221	0.0075	-0.0005	0.0005	0.0001	0.0001	0.0221	0.019	0.0003	0.0003	1.9866
20	587	0.899	-0.031	-0.029	2.479	-0.0547	0.0087	-0.0003	0.0003	0.0001	0.0001	0.0547	0.0086	-0.0003	0.0003	3.9857
20	588	0.899	0.509	-0.028	2.472	-0.028	0.0075	-0.0003	0.0003	0.0001	0.0001	0.028	0.0086	-0.0003	0.0003	5.9717
20	589	0.898	1.496	-0.025	2.472	-0.025	0.0075	-0.0004	0.0004	0.0001	0.0001	0.025	0.0088	-0.0004	0.0004	8.3671

Table VI. Force and Moment Data for the Straight Wing Tip Model, Nacelles Off

Table VI. Continued

Run	Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_n	C_Y	C_L	C_D	C_{ls}	C_{ms}	C_{ns}	L/D
20	590	0.899	3.009	-0.028	2.477	0.1624	0.0091	-0.0004	0.0012	0.0001	0.0005	0.1617	0.0176	-0.0004	0.0012	0.0001	9.1778
20	591	0.900	4.002	-0.025	2.480	0.2126	0.0103	0.0000	0.0005	0.0001	-0.0002	0.2114	0.0251	0.0000	0.0005	0.0001	8.4188
20	592	0.900	6.047	-0.034	2.482	0.3144	0.0130	-0.0003	0.0025	0.0001	0.0006	0.3113	0.0460	-0.0003	0.0025	0.0001	6.7653
20	593	0.898	8.018	-0.035	2.471	0.4126	0.0150	-0.0002	0.0046	0.0001	0.0007	0.4065	0.0724	-0.0002	0.0046	0.0001	5.6134
20	594	0.899	-2.008	-5.037	2.478	-0.0298	0.0074	0.0011	0.0117	0.0006	0.0031	-0.0295	0.0084	0.0011	0.0117	0.0007	-3.5037
20	595	0.899	-1.504	-5.036	2.477	-0.0103	0.0078	0.0018	0.0107	0.0006	0.0031	-0.0101	0.0081	0.0018	0.0107	0.0006	-1.2462
20	596	0.899	-0.495	-5.033	2.475	0.0277	0.0085	0.0032	0.0088	0.0005	0.0030	0.0278	0.0083	0.0032	0.0088	0.0005	3.3630
20	597	0.900	0.105	-5.039	2.482	0.0505	0.0086	0.0040	0.0077	0.0004	0.0031	0.0505	0.0087	0.0040	0.0077	0.0004	5.7800
20	598	0.900	0.551	-5.034	2.482	0.0680	0.0087	0.0047	0.0069	0.0004	0.0030	0.0679	0.0093	0.0047	0.0069	0.0003	7.2947
20	599	0.898	1.568	-5.016	2.471	0.1110	0.0088	0.0064	0.0052	0.0001	0.0028	0.1107	0.0119	0.0064	0.0052	0.0000	9.3411
20	600	0.900	3.094	-4.967	2.479	0.1806	0.0096	0.0082	0.0029	-0.0007	0.0016	0.1799	0.0193	0.0081	0.0029	-0.0011	9.3214
20	601	0.900	4.146	-4.942	2.480	0.2259	0.0104	0.0079	0.0036	-0.0010	0.0014	0.2245	0.0267	0.0079	0.0036	-0.0016	8.4055
20	602	0.900	6.125	-4.942	2.482	0.3173	0.0137	0.0075	0.0094	-0.0009	0.0063	0.3141	0.0475	0.0073	0.0094	-0.0017	6.6136
20	603	0.900	8.099	-4.868	2.479	0.4141	0.0157	0.0104	0.0131	-0.0010	0.0056	0.4078	0.0739	0.0102	0.0131	-0.0025	5.5155
20	604	0.849	-2.066	0.010	2.387	-0.0409	0.0070	-0.0003	0.0120	0.0000	-0.0003	-0.0406	0.0085	-0.0003	0.0120	0.0000	-4.7733
20	605	0.849	-1.503	0.010	2.387	-0.0196	0.0075	-0.0003	0.0111	0.0000	-0.0003	-0.0194	0.0080	-0.0003	0.0111	0.0000	-2.4194
20	606	0.851	-0.502	0.007	2.393	0.0170	0.0083	-0.0003	0.0096	0.0000	-0.0002	0.0171	0.0081	-0.0003	0.0096	0.0000	2.0949
20	607	0.850	-0.053	-0.001	2.389	0.0342	0.0085	-0.0003	0.0088	0.0000	-0.0001	0.0342	0.0085	-0.0003	0.0088	0.0000	4.0250
20	608	0.850	0.519	-0.006	2.391	0.0547	0.0087	-0.0003	0.0079	0.0000	0.0001	0.0546	0.0092	-0.0003	0.0079	0.0000	5.9346
20	609	0.850	1.500	-0.008	2.390	0.0931	0.0088	-0.0004	0.0061	0.0000	0.0001	0.0928	0.0112	-0.0004	0.0061	0.0000	8.2773
20	610	0.849	2.960	-0.012	2.386	0.1561	0.0091	-0.0004	0.0029	0.0001	0.0005	0.1555	0.0171	-0.0004	0.0029	0.0001	9.0887
20	611	0.851	4.045	-0.007	2.393	0.2089	0.0102	0.0000	0.0027	0.0001	-0.0003	0.2077	0.0249	0.0000	0.0027	0.0001	8.3427
20	612	0.850	6.000	-0.013	2.391	0.3023	0.0127	-0.0004	0.0065	0.0001	0.0007	0.2993	0.0443	-0.0004	0.0065	0.0001	6.7631
20	613	0.851	8.035	-0.010	2.393	0.3979	0.0149	0.0000	0.0119	0.0001	0.0010	0.3919	0.0703	0.0000	0.0119	0.0001	5.5716
20	614	0.851	9.776	-0.013	2.393	0.4770	0.0171	0.0000	0.0192	0.0000	0.0012	0.4672	0.0979	0.0000	0.0192	0.0000	4.7741
20	615	0.801	-2.077	0.005	2.295	-0.0396	0.0071	-0.0003	0.0115	0.0000	-0.0003	-0.0394	0.0085	-0.0003	0.0115	0.0000	-4.6224
20	616	0.802	-1.514	0.005	2.298	-0.0190	0.0075	-0.0003	0.0108	0.0000	-0.0004	-0.0188	0.0080	-0.0003	0.0108	0.0000	-2.3466
20	617	0.802	-0.517	0.006	2.296	0.0169	0.0083	-0.0003	0.0095	0.0000	-0.0002	0.0169	0.0082	-0.0003	0.0095	0.0000	2.0737
20	618	0.801	-0.056	0.004	2.295	0.0337	0.0086	-0.0003	0.0089	0.0000	0.0000	0.0337	0.0086	-0.0003	0.0089	0.0000	3.9078
20	619	0.802	0.514	-0.003	2.298	0.0540	0.0088	-0.0003	0.0081	0.0000	0.0001	0.0539	0.0092	-0.0003	0.0081	0.0000	5.8397
20	620	0.803	1.501	-0.007	2.301	0.0913	0.0088	-0.0004	0.0067	0.0000	0.0001	0.0910	0.0112	-0.0004	0.0067	0.0000	8.1263
20	621	0.802	2.991	-0.010	2.298	0.1541	0.0090	-0.0004	0.0039	0.0001	0.0003	0.1534	0.0170	-0.0004	0.0039	0.0001	9.0285
20	622	0.802	4.013	-0.006	2.296	0.2014	0.0100	0.0001	0.0042	0.0001	-0.0003	0.2002	0.0241	0.0001	0.0042	0.0001	8.3250
20	623	0.802	6.021	-0.013	2.296	0.2964	0.0127	-0.0004	0.0093	0.0001	0.0007	0.2934	0.0437	-0.0004	0.0093	0.0001	6.7123
20	624	0.803	7.986	-0.013	2.300	0.3864	0.0148	-0.0001	0.0159	0.0001	0.0010	0.3806	0.0684	-0.0001	0.0159	0.0001	5.5658
20	625	0.802	9.989	-0.012	2.296	0.4763	0.0174	0.0000	0.0249	0.0001	0.0012	0.4661	0.0998	0.0000	0.0249	0.0001	4.6723

Table VI. Continued

Run	Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_n	C_Y	C_L	C_D	C_{ls}	C_{ms}	C_{ns}	L/D
20	627	0.802	-2.004	-5.092	2.296	-0.0270	0.0075	0.0011	0.0107	0.0006	0.0031	-0.0268	0.0085	0.0011	0.0107	0.0007	-3.1565
20	628	0.803	-1.503	-5.092	2.300	-0.0085	0.0080	0.0018	0.0101	0.0006	0.0029	-0.0083	0.0082	0.0018	0.0101	0.0006	-1.0157
20	629	0.803	-0.508	-5.091	2.300	0.0269	0.0087	0.0031	0.0089	0.0005	0.0030	0.0269	0.0084	0.0031	0.0089	0.0005	3.1970
20	630	0.802	0.056	-5.085	2.299	0.0475	0.0087	0.0039	0.0082	0.0004	0.0031	0.0475	0.0088	0.0039	0.0082	0.0004	5.4129
20	631	0.802	0.533	-5.082	2.297	0.0653	0.0088	0.0046	0.0077	0.0003	0.0030	0.0653	0.0094	0.0046	0.0077	0.0003	6.9688
20	632	0.801	1.541	-5.063	2.294	0.1048	0.0088	0.0061	0.0069	0.0001	0.0024	0.1045	0.0116	0.0061	0.0069	-0.0001	9.0258
20	633	0.802	3.060	-5.022	2.299	0.1705	0.0094	0.0080	0.0058	-0.0007	0.0014	0.1697	0.0185	0.0080	0.0058	-0.0011	9.1648
20	634	0.802	4.076	-4.990	2.299	0.2138	0.0100	0.0085	0.0065	-0.0012	0.0008	0.2126	0.0252	0.0084	0.0065	-0.0018	8.4326
20	635	0.802	6.098	-4.966	2.298	0.3081	0.0132	0.0099	0.0125	-0.0013	0.0064	0.3050	0.0458	0.0098	0.0125	-0.0023	6.6549
20	636	0.802	8.109	-4.903	2.298	0.4019	0.0154	0.0126	0.0190	-0.0011	0.0063	0.3957	0.0720	0.0123	0.0190	-0.0028	5.4976
20	637	0.802	10.155	-4.812	2.298	0.4944	0.0181	0.0143	0.0294	-0.0015	0.0044	0.4835	0.1050	0.0138	0.0294	-0.0040	4.6049
20	638	0.751	-2.007	-0.005	2.188	-0.0363	0.0072	-0.0003	0.0111	0.0000	-0.0004	-0.0361	0.0085	-0.0003	0.0111	0.0000	-4.2632
20	639	0.750	-1.510	-0.006	2.186	-0.0183	0.0076	-0.0003	0.0106	0.0000	-0.0004	-0.0181	0.0081	-0.0003	0.0106	0.0000	-2.2431
20	640	0.750	-0.506	-0.008	2.185	0.0172	0.0084	-0.0003	0.0095	0.0000	-0.0002	0.0173	0.0082	-0.0003	0.0095	0.0000	2.0967
20	641	0.751	0.005	-0.011	2.191	0.0353	0.0087	-0.0003	0.0089	0.0000	0.0000	0.0353	0.0087	-0.0003	0.0089	0.0000	4.0611
20	642	0.750	0.513	-0.014	2.187	0.0535	0.0088	-0.0003	0.0083	0.0000	0.0000	0.0534	0.0092	-0.0003	0.0083	0.0000	5.7886
20	643	0.750	1.518	-0.017	2.185	0.0902	0.0088	-0.0004	0.0071	0.0000	0.0001	0.0899	0.0112	-0.0004	0.0071	0.0000	8.0428
20	644	0.750	3.017	-0.021	2.187	0.1523	0.0090	-0.0004	0.0048	0.0001	0.0005	0.1516	0.0170	-0.0004	0.0048	0.0001	8.9344
20	645	0.751	4.014	-0.018	2.189	0.1976	0.0098	0.0002	0.0053	0.0001	-0.0003	0.1964	0.0236	0.0002	0.0053	0.0001	8.3073
20	646	0.751	5.989	-0.023	2.192	0.2891	0.0126	-0.0003	0.0115	0.0001	0.0008	0.2863	0.0427	-0.0003	0.0115	0.0001	6.7039
20	647	0.750	8.016	-0.024	2.187	0.3802	0.0148	-0.0002	0.0186	0.0001	0.0010	0.3745	0.0677	-0.0002	0.0186	0.0001	5.5344
20	648	0.752	9.990	-0.025	2.192	0.4700	0.0174	0.0000	0.0277	0.0001	0.0016	0.4599	0.0987	0.0000	0.0277	0.0001	4.6603
20	649	0.701	-1.988	-0.008	2.076	-0.0354	0.0073	-0.0003	0.0109	0.0000	-0.0003	-0.0351	0.0085	-0.0003	0.0109	0.0000	-4.1224
20	650	0.701	-1.506	-0.007	2.078	-0.0181	0.0077	-0.0003	0.0104	0.0000	-0.0003	-0.0179	0.0081	-0.0003	0.0104	0.0000	-2.1975
20	651	0.701	-0.493	-0.009	2.074	0.0172	0.0084	-0.0003	0.0095	0.0000	-0.0003	0.0173	0.0083	-0.0003	0.0095	0.0000	2.0977
20	652	0.701	-0.014	-0.009	2.079	0.0342	0.0087	-0.0003	0.0090	0.0000	-0.0001	0.0342	0.0086	-0.0003	0.0090	0.0000	3.9607
20	653	0.701	0.507	-0.015	2.078	0.0520	0.0088	-0.0003	0.0085	0.0000	0.0000	0.0519	0.0092	-0.0003	0.0085	0.0000	5.6343
20	654	0.702	1.500	-0.016	2.080	0.0875	0.0088	-0.0004	0.0075	0.0000	0.0000	0.0872	0.0111	-0.0004	0.0075	0.0000	7.8676
20	655	0.701	3.020	-0.020	2.079	0.1500	0.0090	-0.0004	0.0055	0.0001	0.0005	0.1493	0.0169	-0.0004	0.0055	0.0001	8.8556
20	656	0.701	3.992	-0.015	2.079	0.1931	0.0096	0.0001	0.0059	0.0001	-0.0002	0.1920	0.0230	0.0001	0.0059	0.0001	8.3417
20	657	0.702	6.001	-0.021	2.080	0.2856	0.0126	-0.0003	0.0130	0.0001	0.0008	0.2827	0.0423	-0.0003	0.0130	0.0001	6.6768
20	658	0.700	7.987	-0.025	2.073	0.3755	0.0148	-0.0002	0.0203	0.0002	0.0012	0.3698	0.0668	-0.0002	0.0203	0.0002	5.5358
20	659	0.701	9.993	-0.023	2.074	0.4677	0.0174	-0.0001	0.0299	0.0001	0.0012	0.4576	0.0983	-0.0001	0.0299	0.0001	4.6570
20	660	0.701	-2.020	-5.033	2.079	-0.0262	0.0076	0.0011	0.0102	0.0006	0.0030	-0.0259	0.0085	0.0011	0.0102	0.0006	-3.0319
20	661	0.701	-1.487	-5.035	2.077	-0.0073	0.0081	0.0017	0.0098	0.0005	0.0030	-0.0071	0.0083	0.0017	0.0098	0.0006	-0.8529
20	662	0.701	-0.476	-5.033	2.078	0.0278	0.0087	0.0030	0.0089	0.0004	0.0029	0.0279	0.0085	0.0030	0.0089	0.0005	3.2813

Table VI. Continued

Run Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_n	C_Y	C_L	C_D	C_{ls}	C_{ms}	C_{ns}	L/D	
20	663	0.701	0.044	-5.029	2.076	0.0459	0.0088	0.0037	0.0085	0.0004	0.0029	0.0459	0.0088	0.0037	0.0085	0.0004	5.2195
20	664	0.700	0.537	-5.024	2.071	0.0639	0.0088	0.0044	0.0082	0.0003	0.0029	0.0638	0.0094	0.0044	0.0082	0.0002	6.7794
20	665	0.701	1.547	-5.006	2.078	0.1019	0.0088	0.0058	0.0078	0.0000	0.0022	0.1016	0.0115	0.0058	0.0078	-0.0001	8.8384
20	666	0.701	3.051	-4.965	2.079	0.1637	0.0094	0.0077	0.0076	-0.0007	0.0012	0.1629	0.0181	0.0077	0.0076	-0.0011	9.0069
20	667	0.701	4.068	-4.935	2.079	0.2061	0.0100	0.0083	0.0086	-0.0012	0.0006	0.2048	0.0246	0.0082	0.0086	-0.0018	8.3431
20	668	0.700	6.115	-4.896	2.072	0.3006	0.0130	0.0101	0.0151	-0.0016	0.0057	0.2975	0.0450	0.0098	0.0151	-0.0027	6.6174
20	669	0.701	8.095	-4.864	2.077	0.3890	0.0153	0.0116	0.0242	-0.0010	0.0061	0.3830	0.0699	0.0113	0.0242	-0.0027	5.4782
20	670	0.701	10.119	-4.774	2.075	0.4804	0.0180	0.0142	0.0347	-0.0016	0.0049	0.4697	0.1021	0.0137	0.0347	-0.0041	4.5992
20	672	0.602	-2.021	0.004	1.839	-0.0362	0.0073	-0.0003	0.0105	0.0000	-0.0004	-0.0359	0.0086	-0.0003	0.0105	0.0000	-4.1669
20	673	0.602	-1.517	0.005	1.840	-0.0183	0.0077	-0.0003	0.0102	0.0000	-0.0005	-0.0181	0.0082	-0.0003	0.0102	0.0000	-2.2110
20	674	0.602	-0.503	0.004	1.843	0.0166	0.0085	-0.0003	0.0095	0.0000	-0.0003	0.0167	0.0083	-0.0003	0.0095	0.0000	2.0095
20	675	0.602	0.037	0.005	1.842	0.0348	0.0087	-0.0004	0.0091	0.0000	-0.0003	0.0348	0.0087	-0.0004	0.0091	0.0000	4.0032
20	676	0.602	0.496	-0.001	1.840	0.0510	0.0088	-0.0004	0.0087	0.0000	-0.0002	0.0510	0.0092	-0.0004	0.0087	0.0000	5.5159
20	677	0.602	1.498	-0.012	1.842	0.0862	0.0089	-0.0004	0.0081	0.0000	0.0001	0.0860	0.0112	-0.0004	0.0081	0.0000	7.6887
20	678	0.603	3.014	-0.013	1.847	0.1457	0.0088	-0.0004	0.0066	0.0001	0.0002	0.1450	0.0164	-0.0004	0.0066	0.0001	8.8211
20	679	0.601	4.092	-0.014	1.838	0.1934	0.0095	0.0001	0.0073	0.0001	-0.0001	0.1923	0.0233	0.0001	0.0073	0.0001	8.2421
20	680	0.601	5.998	-0.018	1.838	0.2798	0.0125	-0.0004	0.0152	0.0001	0.0009	0.2769	0.0417	-0.0003	0.0152	0.0001	6.6403
20	681	0.601	7.999	-0.020	1.838	0.3699	0.0147	-0.0003	0.0232	0.0002	0.0011	0.3643	0.0660	-0.0003	0.0232	0.0002	5.5181
20	682	0.601	10.007	-0.021	1.836	0.4621	0.0173	-0.0001	0.0337	0.0002	0.0015	0.4521	0.0974	-0.0001	0.0337	0.0002	4.6423
20	683	0.303	-2.034	-0.003	0.995	-0.0362	0.0075	-0.0003	0.0099	0.0000	-0.0006	-0.0360	0.0088	-0.0003	0.0099	0.0000	-4.0887
20	684	0.303	-1.032	-0.002	0.997	-0.0027	0.0081	-0.0004	0.0096	0.0000	-0.0009	-0.0026	0.0082	-0.0004	0.0096	0.0000	-0.3149
20	685	0.302	-0.074	-0.001	0.993	0.0297	0.0087	-0.0004	0.0093	0.0000	-0.0011	0.0297	0.0086	-0.0004	0.0093	0.0000	3.4496
20	686	0.303	2.064	-0.003	0.994	0.1027	0.0089	-0.0005	0.0086	0.0000	-0.0004	0.1023	0.0126	-0.0005	0.0086	0.0001	8.1183
20	687	0.303	3.945	-0.012	0.995	0.1760	0.0093	-0.0004	0.0088	0.0001	0.0002	0.1749	0.0213	-0.0004	0.0088	0.0001	8.1951
20	688	0.303	5.927	-0.008	0.997	0.2648	0.0122	-0.0001	0.0174	-0.0001	0.0001	0.2621	0.0395	-0.0001	0.0174	-0.0001	6.6377
20	689	0.303	7.998	-0.016	0.995	0.3566	0.0145	-0.0003	0.0269	0.0003	0.0007	0.3512	0.0640	-0.0003	0.0269	0.0003	5.4868
20	690	0.302	9.995	-0.017	0.991	0.4466	0.0168	-0.0003	0.0384	0.0003	0.0009	0.4369	0.0941	-0.0002	0.0384	0.0004	4.6445
20	691	0.303	12.041	-0.019	0.997	0.5361	0.0195	-0.0004	0.0547	0.0003	0.0014	0.5202	0.1310	-0.0003	0.0547	0.0004	3.9724
20	692	0.303	13.995	-0.018	0.995	0.6219	0.0223	-0.0002	0.0716	0.0003	0.0017	0.5980	0.1720	-0.0002	0.0716	0.0004	3.4771
20	693	0.302	16.011	-0.022	0.993	0.7156	0.0252	-0.0005	0.0895	0.0004	0.0018	0.6809	0.2216	-0.0004	0.0895	0.0005	3.0730
20	694	0.302	18.078	-0.028	0.991	0.8147	0.0284	-0.0008	0.1082	0.0005	0.0025	0.7657	0.2798	-0.0006	0.1082	0.0008	2.7368
20	695	0.303	-2.041	-5.052	0.994	-0.0266	0.0081	0.0010	0.0095	0.0006	0.0032	-0.0263	0.0090	0.0009	0.0095	0.0006	-2.9133
20	696	0.303	-1.036	-5.050	0.997	0.0065	0.0086	0.0021	0.0092	0.0004	0.0026	0.0067	0.0085	0.0020	0.0092	0.0005	0.7858
20	697	0.303	0.040	-5.050	0.997	0.0423	0.0089	0.0034	0.0089	0.0003	0.0024	0.0423	0.0090	0.0034	0.0089	0.0003	4.7170
20	698	0.303	2.082	-5.031	0.995	0.1144	0.0091	0.0063	0.0095	-0.0003	0.0010	0.1140	0.0133	0.0062	0.0095	-0.0005	8.5809
20	699	0.303	4.052	-4.994	0.994	0.1916	0.0097	0.0081	0.0114	-0.0017	-0.0011	0.1904	0.0232	0.0079	0.0114	-0.0023	8.2003

Table VI. Concluded

Run	Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_n	C_Y	C_L	C_D	C_{ls}	C_{ms}	C_{ns}	L/D
20	700	0.303	6.058	-4.958	0.995	0.2778	0.0114	0.0108	0.0174	-0.0020	-0.0025	0.2750	0.0407	0.0106	0.0174	-0.0032	6.7592
20	701	0.303	8.067	-4.917	0.995	0.3684	0.0149	0.0122	0.0291	-0.0032	0.0038	0.3626	0.0665	0.0116	0.0291	-0.0049	5.4561
20	702	0.303	10.116	-4.893	0.995	0.4606	0.0178	0.0145	0.0434	-0.0015	0.0053	0.4503	0.0984	0.0140	0.0434	-0.0041	4.5775
20	703	0.303	12.123	-4.824	0.995	0.5503	0.0203	0.0168	0.0590	-0.0022	0.0037	0.5338	0.1354	0.0160	0.0590	-0.0057	3.9415
20	704	0.302	14.070	-4.766	0.993	0.6343	0.0230	0.0169	0.0770	-0.0030	0.0015	0.6097	0.1766	0.0157	0.0770	-0.0070	3.4534
20	705	0.303	16.015	-4.682	0.998	0.7256	0.0261	0.0186	0.0949	-0.0041	-0.0012	0.6903	0.2252	0.0167	0.0949	-0.0090	3.0646
20	706	0.303	18.221	-4.582	0.997	0.8321	0.0295	0.0205	0.1163	-0.0052	-0.0039	0.7811	0.2882	0.0179	0.1163	-0.0114	2.7102

Table VII. Force and Moment Data for the Curved Wing Tip Model

Run	Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_n	C_Y	C_L	C_D	C_{ls}	C_{ms}	C_{ns}	L/D
6	110	1.190	-1.784	-0.009	2.886	-0.0103	0.0156	-0.0002	0.0073	0.0000	0.0001	-0.0098	0.0159	-0.0002	0.0073	0.0000	-0.6154
6	111	1.190	-1.214	-0.009	2.882	0.0106	0.0160	-0.0002	0.0054	0.0000	-0.0002	0.0109	0.0157	-0.0002	0.0054	0.0000	0.6947
6	112	1.189	-0.225	-0.010	2.883	0.0463	0.0165	-0.0003	0.0024	0.0000	-0.0002	0.0463	0.0163	-0.0003	0.0024	0.0000	2.8394
6	113	1.190	0.212	-0.012	2.885	0.0620	0.0167	-0.0002	0.0012	0.0000	-0.0003	0.0619	0.0169	-0.0002	0.0012	0.0000	3.6672
6	114	1.189	0.783	-0.011	2.881	0.0833	0.0169	-0.0003	-0.0006	0.0000	-0.0004	0.0831	0.0180	-0.0003	-0.0006	0.0000	4.6087
6	115	1.190	1.743	-0.013	2.884	0.1217	0.0170	-0.0003	-0.0044	0.0001	-0.0005	0.1211	0.0207	-0.0003	-0.0044	0.0001	5.8416
6	116	1.189	3.285	-0.015	2.882	0.1854	0.0172	-0.0003	-0.0091	0.0000	-0.0006	0.1841	0.0278	-0.0003	-0.0091	0.0001	6.6268
6	117	1.189	4.324	-0.001	2.882	0.2305	0.0185	-0.0002	-0.0085	-0.0001	-0.0015	0.2285	0.0358	-0.0002	-0.0085	-0.0001	6.3734
6	118	1.188	6.547	-0.024	2.881	0.3256	0.0206	0.0000	-0.0065	0.0000	-0.0007	0.3211	0.0576	0.0000	-0.0065	0.0000	5.5750
6	119	1.188	7.545	-0.025	2.885	0.3673	0.0214	0.0000	-0.0054	0.0000	-0.0009	0.3614	0.0694	0.0000	-0.0054	0.0000	5.2043
6	120	1.101	-2.016	-0.009	2.788	-0.0195	0.0157	-0.0002	0.0111	-0.0001	0.0002	-0.0189	0.0164	-0.0002	0.0111	-0.0001	-1.1526
6	121	1.101	-1.442	-0.007	2.790	0.0030	0.0163	-0.0002	0.0091	0.0000	0.0001	0.0034	0.0162	-0.0002	0.0091	0.0000	0.2095
6	122	1.100	-0.463	-0.008	2.783	0.0422	0.0170	-0.0002	0.0054	0.0000	-0.0002	0.0423	0.0166	-0.0002	0.0054	0.0000	2.5439
6	123	1.100	-0.032	-0.008	2.782	0.0596	0.0172	-0.0001	0.0037	0.0000	-0.0001	0.0596	0.0172	-0.0001	0.0037	0.0000	3.4748
6	124	1.100	0.541	-0.008	2.783	0.0822	0.0173	-0.0001	0.0014	0.0000	-0.0002	0.0820	0.0180	-0.0001	0.0014	0.0000	4.5473
6	125	1.101	1.502	-0.010	2.788	0.1229	0.0174	0.0000	-0.0028	0.0000	-0.0003	0.1224	0.0206	0.0000	-0.0028	0.0000	5.9389
6	126	1.100	3.017	-0.010	2.784	0.1901	0.0179	0.0000	-0.0084	0.0000	-0.0006	0.1889	0.0279	0.0000	-0.0084	0.0000	6.7666
6	127	1.100	4.062	0.003	2.784	0.2382	0.0193	0.0002	-0.0083	-0.0002	-0.0017	0.2362	0.0361	0.0001	-0.0083	-0.0002	6.5439
6	128	1.100	6.252	-0.010	2.783	0.3371	0.0214	-0.0001	-0.0073	0.0000	-0.0009	0.3328	0.0579	-0.0001	-0.0073	0.0001	5.7434
6	129	1.099	7.238	-0.011	2.783	0.3792	0.0222	0.0000	-0.0061	0.0000	-0.0009	0.3734	0.0698	0.0000	-0.0061	0.0000	5.3466
6	130	0.951	-2.033	-0.010	2.562	-0.0264	0.0108	-0.0002	0.0122	0.0000	0.0003	-0.0260	0.0117	-0.0002	0.0122	0.0000	-2.2238
6	131	0.951	-1.452	-0.010	2.566	-0.0025	0.0113	-0.0002	0.0105	0.0000	0.0000	-0.0022	0.0114	-0.0002	0.0105	0.0000	-0.1936
6	132	0.951	-0.450	-0.008	2.566	0.0382	0.0121	-0.0002	0.0075	0.0000	-0.0002	0.0383	0.0118	-0.0002	0.0075	0.0000	3.2608
6	133	0.950	-0.016	-0.009	2.561	0.0563	0.0122	-0.0002	0.0062	0.0000	-0.0002	0.0563	0.0122	-0.0002	0.0062	0.0000	4.6262
6	134	0.950	0.569	-0.009	2.563	0.0809	0.0122	-0.0002	0.0044	0.0000	-0.0003	0.0808	0.0130	-0.0002	0.0044	0.0000	6.1885
6	135	0.951	1.539	-0.012	2.564	0.1235	0.0124	-0.0002	0.0006	0.0000	-0.0003	0.1231	0.0157	-0.0002	0.0006	0.0000	7.8240
6	136	0.951	3.067	-0.007	2.566	0.1968	0.0131	-0.0002	-0.0052	0.0000	-0.0007	0.1958	0.0236	-0.0002	-0.0052	0.0000	8.2948
6	137	0.950	4.093	0.005	2.561	0.2454	0.0146	0.0003	-0.0048	-0.0002	-0.0021	0.2437	0.0321	0.0003	-0.0048	-0.0002	7.5901
6	138	0.951	6.238	-0.011	2.567	0.3471	0.0177	0.0000	-0.0036	0.0001	-0.0010	0.3431	0.0553	0.0000	-0.0036	0.0001	6.2043
6	139	0.949	8.246	-0.009	2.560	0.4391	0.0200	0.0001	-0.0013	0.0001	-0.0012	0.4317	0.0828	0.0001	-0.0013	0.0001	5.2167
12	541	0.901	-2.328	5.032	2.482	-0.0208	0.0111	-0.0028	0.0107	0.0006	-0.0097	-0.0204	0.0119	-0.0028	0.0107	0.0004	-1.7123
12	542	0.901	-1.734	5.032	2.483	0.0015	0.0116	-0.0036	0.0096	0.0007	-0.0099	0.0018	0.0115	-0.0036	0.0096	0.0005	0.1602
12	543	0.903	-0.691	5.028	2.488	0.0415	0.0122	-0.0053	0.0078	0.0008	-0.0101	0.0416	0.0117	-0.0053	0.0078	0.0007	3.5637
12	544	0.901	-0.236	5.025	2.483	0.0591	0.0123	-0.0060	0.0071	0.0008	-0.0104	0.0591	0.0120	-0.0060	0.0071	0.0008	4.9121
12	545	0.901	0.387	5.018	2.489	0.0839	0.0123	-0.0071	0.0061	0.0009	-0.0105	0.0838	0.0129	-0.0071	0.0061	0.0010	6.5108
12	546	0.897	1.416	4.991	2.471	0.1277	0.0125	-0.0089	0.0045	0.0013	-0.0105	0.1274	0.0157	-0.0089	0.0045	0.0015	8.1211

Table VII. Continued

Ram Point	M_∞	a	β	q_∞	C_N	C_A	C_1	C_m	C_n	C_y	C_L	C_D	C_{L_0}	C_{D_0}	C_{ns}	C_{ms}	C_{ns}	L/D
12	547	0.901	3.051	4.922	2.480	0.2005	0.0133	-0.0108	0.0029	0.0024	-0.0091	0.1995	0.0239	-0.0107	0.0029	8.3323	7.6935	
12	548	0.900	4.072	4.882	2.479	0.2442	0.0142	-0.0178	0.3486	0.0116	-0.0102	0.0023	-0.0315	0.2425	-0.0142	0.3446	0.0558	
12	549	0.900	6.284	4.875	2.488	0.4423	0.0138	-0.0198	0.4793	0.0118	-0.020	2.496	-0.0115	-0.0109	0.0003	0.0004	0.0001	
12	550	0.901	8.191	4.793	2.488	0.4423	0.0138	-0.0198	0.3486	0.0116	-0.0102	0.0023	-0.0142	0.3446	-0.0146	0.046	5.2632	
12	551	0.898	-2.352	-0.018	2.479	0.0234	0.0109	-0.020	2.485	0.0123	-0.0004	0.0004	-0.0115	0.0229	-0.0119	0.0119	1.9252	
12	552	0.903	-1.756	-0.020	2.479	0.020	0.0115	-0.0118	2.485	0.0124	-0.0004	0.0003	-0.0115	0.0229	-0.0119	0.0118	6.1751	
12	553	0.901	-0.748	-0.020	2.488	0.0387	0.0122	-0.0004	0.0387	0.0122	-0.0004	0.0006	-0.0389	0.0117	-0.0004	0.0000	3.3304	
12	554	0.900	-0.303	-0.020	2.485	0.0558	0.0123	-0.0004	0.0558	0.0123	-0.0004	0.0004	-0.0552	0.0127	-0.0004	0.0000	4.6485	
12	555	0.901	0.286	-0.019	2.490	0.0795	0.0123	-0.0004	0.0795	0.0123	-0.0004	0.0007	-0.0552	0.0127	-0.0004	0.0000	6.2401	
12	556	0.903	1.276	-0.016	2.495	0.1204	0.0124	-0.0005	0.1204	0.0124	-0.0005	0.0005	-0.1201	0.0121	-0.0005	0.0000	7.9526	
12	557	0.899	2.842	-0.012	2.479	0.1907	0.0130	-0.0005	0.1907	0.0130	-0.0005	0.0005	-0.0224	0.0240	-0.0224	0.0007	8.4751	
12	558	0.905	3.907	0.002	2.500	0.2419	0.0144	-0.0144	0.3468	0.0170	-0.0001	0.0001	-0.3431	0.0229	-0.0229	0.0119	7.7843	
12	559	0.903	6.014	-0.014	2.494	0.4474	0.0149	-0.0049	0.4474	0.0149	-0.0049	0.0003	-0.4403	0.0817	-0.0049	0.0001	6.4454	
12	560	0.902	8.070	-0.012	2.484	0.1907	0.0130	-0.0003	0.1907	0.0130	-0.0003	0.0003	-0.0817	0.0227	-0.0003	0.0001	3.3925	
12	561	0.902	-2.348	-0.019	2.494	0.0234	0.0109	-0.0108	0.0234	0.0109	-0.0108	0.0002	-0.0229	0.0229	-0.0229	0.0119	1.9288	
12	562	0.899	-1.747	-0.001	2.481	0.0234	0.0115	-0.0001	0.0234	0.0115	-0.0001	0.0003	-0.0229	0.0229	-0.0229	0.0119	1.9288	
12	563	0.903	0.355	-0.031	2.497	0.0572	0.0121	-0.0122	0.0572	0.0121	-0.0122	0.0061	-0.0573	0.0127	-0.0061	0.0006	0.0224	
12	564	0.900	-0.267	-0.031	2.478	0.0572	0.0121	-0.0122	0.0572	0.0121	-0.0122	0.0068	-0.0573	0.0118	-0.0068	0.0008	4.8478	
12	565	0.897	1.389	-0.031	2.493	0.0988	0.0131	-0.0131	0.1988	0.0131	-0.0131	0.0021	-0.1988	0.0223	-0.0021	0.0014	8.1733	
12	566	0.902	3.024	-4.932	2.486	0.1988	0.0139	-0.0139	0.1988	0.0139	-0.0139	0.0024	-0.1988	0.0223	-0.0024	0.0014	8.4012	
12	567	0.902	4.017	-4.886	2.477	0.2421	0.0139	-0.0139	0.2421	0.0139	-0.0139	0.0024	-0.2421	0.0223	-0.0024	0.0014	7.8053	
12	568	0.900	4.017	-4.886	2.477	0.2421	0.0139	-0.0139	0.2421	0.0139	-0.0139	0.0024	-0.2421	0.0223	-0.0024	0.0014	7.8056	
12	569	0.902	6.231	-4.868	2.494	0.3466	0.0175	-0.0175	0.3466	0.0175	-0.0175	0.0024	-0.3466	0.0223	-0.0024	0.0014	6.2260	
12	570	0.902	7.832	-4.806	2.493	0.4280	0.0192	-0.0192	0.4280	0.0192	-0.0192	0.0024	-0.4280	0.0223	-0.0024	0.0014	5.4508	
12	571	0.852	-2.070	-0.021	2.390	0.0236	0.0110	-0.0110	0.0236	0.0110	-0.0110	0.0022	-0.0232	0.0118	-0.0022	0.0002	1.9586	
6	150	0.850	-2.015	2.397	0.0014	0.0115	0.0115	-0.0014	0.0014	0.0115	-0.0014	0.0002	-0.0011	0.0115	-0.0002	0.0002	0.0956	
6	151	0.852	-1.488	-0.015	2.397	0.0014	0.0115	-0.0014	0.0014	0.0115	-0.0014	0.0002	-0.0011	0.0115	-0.0002	0.0002	1.9586	
6	152	0.850	-0.480	-0.009	2.391	0.0364	0.0122	-0.0122	0.0364	0.0122	-0.0122	0.0077	-0.0364	0.0119	-0.0077	0.0007	3.0744	
6	153	0.852	-0.030	-0.008	2.396	0.0531	0.0123	-0.0123	0.0531	0.0123	-0.0123	0.0069	-0.0531	0.0122	-0.0069	0.0000	4.3340	
6	154	0.852	0.557	-0.007	2.399	0.0754	0.0123	-0.0123	0.0754	0.0123	-0.0123	0.0093	-0.0754	0.0120	-0.0093	0.0000	5.7673	
6	155	0.849	1.534	-0.009	2.386	0.1147	0.0124	-0.0124	0.1147	0.0124	-0.0124	0.0093	-0.1147	0.0119	-0.0093	0.0000	4.3340	
6	156	0.848	3.110	-0.006	2.381	0.1821	0.0128	-0.0128	0.1821	0.0128	-0.0128	0.0093	-0.1821	0.0119	-0.0093	0.0001	7.9305	
6	157	0.850	4.135	-0.004	2.387	0.2302	0.0140	-0.0140	0.2302	0.0140	-0.0140	0.0093	-0.2302	0.0119	-0.0093	0.0001	7.4728	
6	158	0.852	6.256	-0.011	2.396	0.3312	0.0168	-0.0168	0.3312	0.0168	-0.0168	0.0093	-0.3312	0.0119	-0.0093	0.0001	6.2067	
6	159	0.852	8.281	-0.005	2.399	0.4247	0.0188	-0.0188	0.4247	0.0188	-0.0188	0.0093	-0.4247	0.0119	-0.0093	0.0001	5.2370	
6	160	0.798	-2.064	-0.012	2.281	0.0205	0.0111	-0.0111	0.0205	0.0111	-0.0111	0.0093	-0.0205	0.0119	-0.0093	0.0001	1.6937	
6	161	0.798	-1.475	-0.011	2.272	0.0003	0.0116	-0.0116	0.0003	0.0116	-0.0116	0.0093	-0.0003	0.0116	-0.0093	0.0005	0.0533	
6	162	0.796	-1.475	-0.011	2.272	0.0111	0.0116	-0.0116	0.0111	0.0116	-0.0116	0.0093	-0.0005	0.0116	-0.0093	0.0005	0.0533	

Table VII. Continued

Run Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_n	C_Y	C_L	C_D	C_{ls}	C_{ms}	C_{ns}	L/D	
6	163	0.802	0.005	5.005	2.300	0.0534	0.0122	-0.0055	0.0078	0.0008	-0.0095	0.0534	0.0122	-0.0055	0.0078	0.0008	4.3719
6	164	0.799	0.614	4.995	2.287	0.0767	0.0123	-0.0065	0.0074	0.0009	-0.0095	0.0765	0.0131	-0.0065	0.0074	0.0010	5.8510
6	165	0.801	1.638	4.973	2.294	0.1169	0.0123	-0.0081	0.0067	0.0013	-0.0093	0.1165	0.0157	-0.0081	0.0067	0.0015	7.4301
6	166	0.797	3.246	4.905	2.275	0.1849	0.0130	-0.0102	0.0063	0.0025	-0.0079	0.1839	0.0235	-0.0100	0.0063	0.0031	7.8370
6	167	0.797	4.262	4.870	2.277	0.2269	0.0137	-0.0106	0.0076	0.0030	-0.0073	0.2253	0.0305	-0.0104	0.0076	0.0038	7.3746
6	168	0.796	6.434	4.860	2.272	0.3256	0.0171	-0.0122	0.0161	0.0023	-0.0135	0.3216	0.0534	-0.0119	0.0161	0.0036	6.0189
6	169	0.796	8.510	4.771	2.273	0.4217	0.0193	-0.0154	0.0235	0.0025	-0.0128	0.4142	0.0815	-0.0148	0.0235	0.0048	5.0843
6	170	0.803	8.970	4.742	2.303	0.4445	0.0199	-0.0161	0.0250	0.0027	-0.0126	0.4360	0.0889	-0.0154	0.0250	0.0051	4.9013
6	216	0.802	-2.032	-0.003	2.298	-0.0214	0.0110	-0.0002	0.0097	0.0000	0.0006	-0.0210	0.0118	-0.0002	0.0097	0.0000	-1.7821
6	217	0.800	-1.503	-0.004	2.292	-0.0018	0.0115	-0.0002	0.0092	0.0000	0.0005	-0.0015	0.0115	-0.0002	0.0092	0.0000	-0.1317
6	218	0.800	-0.465	-0.001	2.292	0.0359	0.0121	-0.0002	0.0077	0.0000	0.0003	0.0360	0.0118	-0.0002	0.0077	0.0000	3.0384
6	219	0.796	-0.024	0.000	2.273	0.0520	0.0122	-0.0002	0.0072	0.0000	0.0003	0.0520	0.0122	-0.0002	0.0072	0.0000	4.2674
6	220	0.801	0.568	0.001	2.297	0.0745	0.0123	-0.0002	0.0063	0.0000	0.0002	0.0744	0.0130	-0.0002	0.0063	0.0000	5.7038
6	221	0.801	1.575	-0.002	2.298	0.1138	0.0124	-0.0002	0.0045	0.0000	0.0001	0.1134	0.0155	-0.0002	0.0045	0.0000	7.3140
6	222	0.799	3.121	0.003	2.288	0.1780	0.0127	-0.0002	0.0028	-0.0001	-0.0002	0.1770	0.0224	-0.0002	0.0028	-0.0001	7.9078
6	223	0.801	4.156	0.012	2.297	0.2258	0.0139	0.0004	0.0046	-0.0002	-0.0019	0.2242	0.0302	0.0004	0.0046	-0.0002	7.4164
6	224	0.798	6.284	-0.007	2.278	0.3227	0.0166	-0.0002	0.0118	0.0000	-0.0001	0.3190	0.0519	-0.0002	0.0118	0.0000	6.1500
6	225	0.797	8.335	-0.004	2.276	0.4163	0.0188	0.0001	0.0193	-0.0001	-0.0002	0.4092	0.0790	0.0001	0.0193	-0.0001	5.1826
6	226	0.802	10.300	0.000	2.301	0.5057	0.0213	0.0002	0.0282	-0.0001	-0.0003	0.4937	0.1114	0.0002	0.0282	-0.0001	4.4339
6	227	0.797	-2.126	-5.048	2.279	-0.0244	0.0110	0.0019	0.0098	-0.0006	0.0098	-0.0240	0.0119	0.0019	0.0098	-0.0005	-2.0226
6	228	0.801	-1.484	-5.047	2.295	-0.0014	0.0114	0.0027	0.0091	-0.0007	0.0096	-0.0011	0.0115	0.0027	0.0091	-0.0006	-0.0952
6	229	0.799	-0.455	-5.044	2.286	0.0358	0.0121	0.0041	0.0079	-0.0008	0.0095	0.0359	0.0118	0.0041	0.0079	-0.0007	3.0499
6	230	0.800	-0.032	-5.041	2.295	0.0514	0.0121	0.0048	0.0074	-0.0008	0.0096	0.0514	0.0121	0.0048	0.0074	-0.0008	4.2533
6	231	0.795	0.512	-5.034	2.267	0.0721	0.0121	0.0057	0.0069	-0.0009	0.0095	0.0720	0.0128	0.0057	0.0069	-0.0010	5.6381
6	232	0.801	1.657	-5.008	2.299	0.1176	0.0123	0.0075	0.0060	-0.0013	0.0090	0.1172	0.0157	0.0075	0.0060	-0.0015	7.4705
6	233	0.801	3.310	-4.940	2.298	0.1872	0.0129	0.0096	0.0055	-0.0025	0.0071	0.1861	0.0237	0.0095	0.0055	-0.0030	7.8688
6	234	0.796	4.316	-4.897	2.272	0.2291	0.0135	0.0102	0.0067	-0.0032	0.0059	0.2274	0.0307	0.0099	0.0067	-0.0039	7.4142
6	171	0.751	-2.075	-0.035	2.191	-0.0225	0.0110	-0.0002	0.0095	-0.0001	0.0007	-0.0221	0.0118	-0.0002	0.0095	-0.0001	-1.8700
6	172	0.749	-1.494	-0.037	2.180	-0.0014	0.0115	-0.0002	0.0090	-0.0001	0.0005	-0.0011	0.0116	-0.0002	0.0090	-0.0001	-0.0916
6	173	0.748	-0.486	-0.038	2.177	0.0343	0.0121	-0.0002	0.0079	0.0000	0.0003	0.0344	0.0118	-0.0002	0.0079	0.0000	2.9188
6	174	0.749	-0.046	-0.037	2.180	0.0497	0.0122	-0.0002	0.0074	-0.0001	0.0002	0.0497	0.0122	-0.0002	0.0074	-0.0001	4.0810
6	175	0.752	0.544	-0.038	2.192	0.0718	0.0123	-0.0002	0.0067	0.0000	0.0001	0.0717	0.0130	-0.0002	0.0067	0.0000	5.5121
6	176	0.751	1.510	-0.038	2.190	0.1075	0.0123	-0.0002	0.0054	0.0000	-0.0003	0.1071	0.0151	-0.0002	0.0054	0.0000	7.1049
6	177	0.751	3.082	-0.031	2.191	0.1725	0.0126	-0.0002	0.0038	-0.0002	-0.0007	0.1715	0.0218	-0.0002	0.0038	-0.0001	7.8578
6	178	0.751	4.102	-0.018	2.187	0.2187	0.0137	0.0003	0.0058	-0.0002	-0.0024	0.2172	0.0293	0.0002	0.0058	-0.0003	7.4152
6	179	0.750	6.227	-0.025	2.187	0.3148	0.0166	-0.0003	0.0139	-0.0001	-0.0015	0.3111	0.0506	-0.0003	0.0139	0.0000	6.1441

Table VII. Continued

Run Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_n	C_Y	C_L	C_D	C_{ls}	C_{ms}	C_{ns}	L/D
6 180	0.749	8.263	-0.020	2.184	0.4072	0.0186	-0.0001	0.0216	-0.0001	-0.0019	0.4003	0.0769	-0.0001	0.0216	-0.0001	5.2025
6 181	0.702	-2.071	5.033	2.087	-0.0207	0.0111	-0.0024	0.0096	0.0006	-0.0089	-0.0203	0.0119	-0.0025	0.0096	0.0005	-1.7115
6 182	0.701	-1.493	5.032	2.072	-0.0003	0.0116	-0.0032	0.0092	0.0006	-0.0091	0.0000	0.0116	-0.0032	0.0092	0.0005	-0.0013
6 183	0.702	-0.457	5.030	2.082	0.0356	0.0121	-0.0046	0.0084	0.0007	-0.0093	0.0357	0.0118	-0.0046	0.0084	0.0007	3.0191
6 184	0.703	-0.012	5.025	2.089	0.0518	0.0122	-0.0053	0.0081	0.0008	-0.0091	0.0518	0.0122	-0.0053	0.0081	0.0008	4.2389
6 185	0.698	0.583	5.020	2.061	0.0730	0.0122	-0.0063	0.0080	0.0009	-0.0092	0.0729	0.0129	-0.0063	0.0080	0.0010	5.6440
6 186	0.703	1.613	4.999	2.087	0.1124	0.0123	-0.0079	0.0077	0.0013	-0.0087	0.1120	0.0154	-0.0078	0.0077	0.0015	7.2583
6 187	0.702	3.204	4.934	2.079	0.1763	0.0128	-0.0099	0.0079	0.0025	-0.0072	0.1753	0.0226	-0.0098	0.0079	0.0031	7.7558
6 188	0.702	4.206	4.900	2.080	0.2179	0.0135	-0.0106	0.0094	0.0030	-0.0066	0.2163	0.0294	-0.0104	0.0094	0.0038	7.3504
6 189	0.698	6.313	4.889	2.062	0.3119	0.0167	-0.0123	0.0187	0.0024	-0.0132	0.3082	0.0509	-0.0120	0.0187	0.0038	6.0530
6 190	0.699	8.378	4.816	2.069	0.4053	0.0190	-0.0149	0.0277	0.0025	-0.0126	0.3982	0.0778	-0.0144	0.0277	0.0046	5.1154
6 191	0.698	9.626	4.749	2.063	0.4613	0.0205	-0.0168	0.0340	0.0028	-0.0124	0.4514	0.0973	-0.0161	0.0340	0.0056	4.6381
6 192	0.699	-2.087	0.006	2.068	-0.0229	0.0111	-0.0002	0.0095	-0.0001	0.0008	-0.0225	0.0119	-0.0002	0.0095	-0.0001	-1.8900
6 193	0.698	-1.508	0.007	2.062	-0.0023	0.0116	-0.0002	0.0090	-0.0001	0.0005	-0.0020	0.0116	-0.0002	0.0090	-0.0001	-0.1745
6 194	0.698	-0.512	0.007	2.060	0.0326	0.0121	-0.0002	0.0080	0.0000	0.0004	0.0327	0.0118	-0.0002	0.0080	0.0000	2.7667
6 195	0.700	-0.066	0.020	2.074	0.0488	0.0123	-0.0003	0.0076	-0.0001	0.0002	0.0488	0.0122	-0.0003	0.0076	-0.0001	3.9986
6 196	0.699	0.434	0.016	2.070	0.0670	0.0123	-0.0003	0.0071	0.0000	0.0000	0.0669	0.0128	-0.0003	0.0071	0.0000	5.2176
6 197	0.702	1.505	0.017	2.080	0.1066	0.0123	-0.0003	0.0059	0.0000	-0.0004	0.1062	0.0151	-0.0003	0.0059	0.0000	7.0374
6 198	0.703	3.057	0.020	2.087	0.1685	0.0125	-0.0004	0.0045	-0.0001	-0.0009	0.1676	0.0215	-0.0004	0.0045	-0.0001	7.7994
6 199	0.700	4.047	0.027	2.075	0.2140	0.0136	-0.0001	0.0065	-0.0002	-0.0021	0.2125	0.0286	-0.0001	0.0065	-0.0002	7.4250
6 200	0.700	6.143	0.019	2.069	0.3054	0.0163	-0.0005	0.0153	-0.0001	-0.0016	0.3019	0.0489	-0.0005	0.0153	0.0000	6.1700
6 201	0.700	8.163	0.022	2.072	0.3992	0.0185	-0.0002	0.0233	-0.0001	-0.0022	0.3925	0.0750	-0.0002	0.0233	-0.0001	5.2316
6 202	0.697	9.393	0.024	2.059	0.4543	0.0200	-0.0001	0.0294	-0.0002	-0.0024	0.4450	0.0939	-0.0002	0.0294	-0.0001	4.7385
6 203	0.699	-2.090	0.016	2.068	-0.0230	0.0111	-0.0002	0.0094	-0.0001	0.0006	-0.0226	0.0119	-0.0002	0.0094	-0.0001	-1.8902
6 204	0.699	-1.506	0.014	2.064	-0.0023	0.0115	-0.0002	0.0089	0.0000	0.0005	-0.0020	0.0116	-0.0002	0.0089	0.0000	-0.1707
6 205	0.703	-0.501	0.014	2.087	0.0334	0.0122	-0.0003	0.0080	0.0000	0.0002	0.0335	0.0119	-0.0003	0.0080	0.0000	2.8175
6 206	0.703	-2.091	-5.026	2.089	-0.0237	0.0111	0.0017	0.0094	-0.0006	0.0098	-0.0233	0.0119	0.0018	0.0094	-0.0006	-1.9583
6 207	0.702	-1.502	-5.025	2.084	-0.0028	0.0115	0.0025	0.0090	-0.0007	0.0096	-0.0025	0.0116	0.0025	0.0090	-0.0006	-0.2154
6 208	0.697	-0.489	-5.022	2.057	0.0323	0.0120	0.0038	0.0082	-0.0008	0.0093	0.0324	0.0118	0.0039	0.0082	-0.0008	2.7508
6 209	0.699	-0.045	-5.018	2.067	0.0484	0.0121	0.0045	0.0079	-0.0009	0.0092	0.0484	0.0121	0.0045	0.0079	-0.0009	4.0064
6 210	0.703	0.485	-5.013	2.089	0.0678	0.0121	0.0054	0.0075	-0.0009	0.0089	0.0677	0.0127	0.0054	0.0075	-0.0010	5.3495
6 211	0.698	1.589	-4.990	2.065	0.1097	0.0122	0.0070	0.0072	-0.0013	0.0082	0.1093	0.0152	0.0070	0.0072	-0.0015	7.1673
6 212	0.699	3.194	-4.930	2.068	0.1751	0.0127	0.0092	0.0074	-0.0025	0.0061	0.1741	0.0225	0.0090	0.0074	-0.0030	7.7531
6 213	0.701	4.150	-4.890	2.075	0.2141	0.0132	0.0100	0.0083	-0.0031	0.0050	0.2125	0.0287	0.0097	0.0083	-0.0039	7.4171
6 214	0.697	6.216	-4.819	2.058	0.3050	0.0151	0.0129	0.0148	-0.0038	0.0044	0.3016	0.0481	0.0124	0.0148	-0.0052	6.2724
6 215	0.702	8.380	-4.786	2.085	0.4063	0.0187	0.0146	0.0260	-0.0033	0.0102	0.3993	0.0777	0.0139	0.0260	-0.0054	5.1365

Table VII. Continued

Run Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_n	C_Y	C_L	C_D	C_{ls}	C_{ms}	C_{ns}	L/D
6 236	0.602	-2.108	0.029	1.836	-0.0246	0.0111	-0.0002	0.0093	0.0000	0.0005	-0.0242	0.0120	-0.0002	0.0093	0.0000	-2.0207
6 237	0.605	-1.529	0.031	1.860	-0.0039	0.0116	-0.0003	0.0089	0.0000	0.0005	-0.0035	0.0117	-0.0003	0.0089	0.0000	-0.3033
6 238	0.603	-0.541	0.033	1.844	0.0300	0.0122	-0.0003	0.0083	0.0000	0.0003	0.0301	0.0119	-0.0003	0.0083	0.0000	2.5283
6 239	0.602	-0.105	0.030	1.841	0.0452	0.0124	-0.0003	0.0079	0.0000	0.0003	0.0452	0.0123	-0.0003	0.0079	0.0000	3.6767
6 240	0.601	0.459	0.034	1.835	0.0653	0.0123	-0.0003	0.0075	0.0000	0.0004	0.0652	0.0129	-0.0003	0.0075	0.0000	5.0732
6 241	0.605	1.448	0.035	1.857	0.1015	0.0124	-0.0003	0.0067	0.0000	0.0003	0.1011	0.0149	-0.0003	0.0067	0.0000	6.7826
6 242	0.604	2.966	0.035	1.852	0.1615	0.0124	-0.0003	0.0057	-0.0001	0.0002	0.1606	0.0208	-0.0003	0.0057	0.0000	7.7281
6 243	0.605	3.944	0.036	1.856	0.2042	0.0133	-0.0005	0.0077	-0.0003	-0.0001	0.2027	0.0273	-0.0005	0.0077	-0.0002	7.4161
6 244	0.602	5.974	0.028	1.843	0.2942	0.0162	-0.0004	0.0169	0.0000	0.0001	0.2909	0.0468	-0.0004	0.0169	0.0000	6.2213
6 245	0.604	7.952	0.029	1.855	0.3828	0.0182	-0.0002	0.0255	0.0000	0.0001	0.3766	0.0710	-0.0002	0.0255	0.0000	5.3037
6 246	0.602	9.799	0.033	1.844	0.4649	0.0204	0.0000	0.0356	0.0000	-0.0001	0.4547	0.0993	0.0000	0.0356	0.0000	4.5807
6 247	0.303	-2.035	5.035	0.999	-0.0234	0.0112	-0.0023	0.0091	0.0006	-0.0083	-0.0229	0.0120	-0.0023	0.0091	0.0005	-1.9060
6 248	0.303	-0.995	5.033	1.000	0.0109	0.0119	-0.0036	0.0090	0.0007	-0.0081	0.0111	0.0118	-0.0036	0.0090	0.0007	0.9410
6 249	0.303	0.026	5.031	1.000	0.0446	0.0122	-0.0050	0.0089	0.0009	-0.0079	0.0446	0.0122	-0.0050	0.0089	0.0009	3.6491
6 250	0.303	2.095	5.005	0.999	0.1173	0.0123	-0.0080	0.0096	0.0017	-0.0060	0.1168	0.0166	-0.0080	0.0096	0.0020	7.0462
6 251	0.304	4.140	4.963	1.001	0.1971	0.0130	-0.0102	0.0123	0.0031	-0.0041	0.1956	0.0272	-0.0100	0.0123	0.0038	7.1839
6 252	0.303	6.031	4.931	0.997	0.2750	0.0147	-0.0121	0.0194	0.0034	-0.0034	0.2720	0.0435	-0.0117	0.0194	0.0047	6.2521
6 253	0.304	8.120	4.911	1.001	0.3681	0.0183	-0.0139	0.0333	0.0027	-0.0107	0.3618	0.0701	-0.0134	0.0333	0.0046	5.1617
6 254	0.303	10.253	4.837	0.999	0.4669	0.0207	-0.0179	0.0468	0.0035	-0.0102	0.4557	0.1034	-0.0170	0.0468	0.0066	4.4058
6 255	0.303	12.240	4.772	1.000	0.5539	0.0233	-0.0196	0.0632	0.0039	-0.0083	0.5363	0.1402	-0.0183	0.0632	0.0080	3.8261
6 256	0.303	14.193	4.704	1.000	0.6396	0.0261	-0.0200	0.0811	0.0047	-0.0054	0.6137	0.1821	-0.0182	0.0811	0.0095	3.3698
6 257	0.303	16.214	4.614	1.000	0.7351	0.0290	-0.0219	0.0994	0.0058	-0.0023	0.6978	0.2331	-0.0194	0.0994	0.0116	2.9939
6 258	0.303	18.227	4.515	0.998	0.8351	0.0320	-0.0240	0.1186	0.0069	0.0009	0.7832	0.2916	-0.0206	0.1186	0.0141	2.6861
6 259	0.303	-2.034	-0.005	0.999	-0.0240	0.0113	-0.0004	0.0090	-0.0001	0.0015	-0.0236	0.0122	-0.0004	0.0090	-0.0001	-1.9366
6 260	0.303	-1.004	-0.007	1.000	0.0106	0.0120	-0.0004	0.0088	0.0000	0.0011	0.0108	0.0118	-0.0004	0.0088	0.0000	0.9177
6 261	0.304	0.019	-0.007	1.003	0.0443	0.0123	-0.0004	0.0084	0.0000	0.0006	0.0443	0.0124	-0.0004	0.0084	0.0000	3.5861
6 262	0.303	2.035	-0.006	0.998	0.1162	0.0124	-0.0004	0.0075	0.0000	0.0004	0.1157	0.0165	-0.0005	0.0075	0.0000	7.0198
6 263	0.304	4.073	-0.003	1.001	0.1967	0.0131	-0.0005	0.0093	-0.0002	-0.0006	0.1953	0.0270	-0.0005	0.0093	-0.0002	7.2281
6 264	0.303	6.010	-0.005	1.000	0.2813	0.0161	-0.0003	0.0197	0.0000	-0.0005	0.2781	0.0454	-0.0003	0.0197	0.0000	6.1193
6 265	0.304	8.030	-0.004	1.001	0.3700	0.0180	-0.0002	0.0302	-0.0001	-0.0008	0.3638	0.0695	-0.0002	0.0302	0.0000	5.2347
6 266	0.303	10.136	-0.002	0.998	0.4628	0.0205	-0.0001	0.0435	-0.0002	-0.0014	0.4519	0.1016	-0.0002	0.0435	-0.0001	4.4467
6 267	0.303	12.098	-0.002	0.999	0.5476	0.0229	-0.0003	0.0594	-0.0002	-0.0017	0.5307	0.1372	-0.0003	0.0594	-0.0001	3.8678
6 268	0.303	14.042	-0.002	0.998	0.6361	0.0256	-0.0006	0.0758	-0.0003	-0.0024	0.6109	0.1792	-0.0006	0.0758	-0.0002	3.4092
6 269	0.304	16.035	-0.001	1.002	0.7281	0.0282	-0.0005	0.0931	-0.0004	-0.0029	0.6919	0.2282	-0.0006	0.0931	-0.0002	3.0319
6 270	0.304	18.054	0.000	1.002	0.8286	0.0311	-0.0005	0.1115	-0.0005	-0.0034	0.7782	0.2864	-0.0007	0.1115	-0.0003	2.7173
6 271	0.303	-2.026	-5.011	0.997	-0.0247	0.0112	0.0015	0.0088	-0.0006	0.0104	-0.0243	0.0121	0.0016	0.0088	-0.0006	-2.0106

Table VII. Concluded

Run Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_n	C_Y	C_L	C_D	C_{ls}	C_{ms}	C_{ns}	L/D
6 272	0.304	-0.995	-5.013	1.001	0.0099	0.0120	0.0028	0.0088	-0.0007	0.0101	0.0101	0.0118	0.0028	0.0088	-0.0007	0.8576
6 273	0.304	0.027	-5.010	1.001	0.0442	0.0122	0.0041	0.0084	-0.0009	0.0096	0.0442	0.0122	0.0041	0.0084	-0.0009	3.6185
6 274	0.303	2.085	-4.991	0.999	0.1168	0.0122	0.0070	0.0092	-0.0016	0.0078	0.1163	0.0164	0.0070	0.0092	-0.0019	7.0775
6 275	0.303	4.120	-4.947	1.001	0.1963	0.0128	0.0095	0.0115	-0.0032	0.0045	0.1949	0.0269	0.0092	0.0115	-0.0039	7.2510
6 276	0.303	6.029	-4.898	1.000	0.2751	0.0139	0.0120	0.0170	-0.0044	0.0020	0.2721	0.0427	0.0115	0.0170	-0.0056	6.3766
6 277	0.303	8.054	-4.837	0.997	0.3636	0.0164	0.0147	0.0279	-0.0056	-0.0005	0.3577	0.0672	0.0138	0.0279	-0.0076	5.3253
6 278	0.304	10.259	-4.820	1.001	0.4689	0.0207	0.0173	0.0459	-0.0035	0.0083	0.4577	0.1039	0.0164	0.0459	-0.0065	4.4068
6 279	0.303	12.218	-4.752	0.997	0.5555	0.0232	0.0196	0.0615	-0.0041	0.0065	0.5380	0.1402	0.0183	0.0615	-0.0082	3.8375
6 280	0.303	14.189	-4.687	0.997	0.6415	0.0259	0.0192	0.0804	-0.0050	0.0032	0.6156	0.1824	0.0174	0.0804	-0.0096	3.3751
6 281	0.303	16.178	-4.600	0.995	0.7345	0.0287	0.0209	0.0982	-0.0061	0.0002	0.6974	0.2322	0.0184	0.0982	-0.0117	3.0031
6 282	0.303	18.211	-4.499	0.997	0.8356	0.0318	0.0229	0.1173	-0.0073	-0.0031	0.7838	0.2914	0.0195	0.1173	-0.0141	2.6902
6 283	0.303	-2.041	-7.510	0.997	-0.0241	0.0112	0.0024	0.0088	-0.0009	0.0150	-0.0237	0.0121	0.0024	0.0088	-0.0008	-1.9653
6 284	0.303	-0.992	-7.510	0.997	0.0107	0.0119	0.0043	0.0089	-0.0010	0.0146	0.0109	0.0117	0.0043	0.0089	-0.0010	0.9332
6 285	0.303	0.056	-7.506	0.997	0.0464	0.0122	0.0064	0.0092	-0.0012	0.0142	0.0464	0.0122	0.0064	0.0092	-0.0012	3.7923
6 286	0.303	2.137	-7.475	0.996	0.1202	0.0122	0.0107	0.0107	-0.0021	0.0122	0.1197	0.0166	0.0106	0.0107	-0.0025	7.1906
6 287	0.303	4.213	-7.407	0.999	0.1997	0.0125	0.0146	0.0137	-0.0045	0.0082	0.1983	0.0272	0.0142	0.0137	-0.0055	7.2946
6 288	0.303	6.130	-7.332	0.998	0.2762	0.0134	0.0176	0.0197	-0.0065	0.0043	0.2732	0.0428	0.0168	0.0197	-0.0083	6.3847
6 289	0.303	8.188	-7.254	0.999	0.3711	0.0169	0.0213	0.0312	-0.0082	0.0076	0.3650	0.0696	0.0199	0.0312	-0.0111	5.2461
6 290	0.303	10.375	-7.145	1.000	0.4684	0.0201	0.0252	0.0484	-0.0103	0.0065	0.4572	0.1041	0.0229	0.0484	-0.0146	4.3907
6 291	0.303	12.393	-7.101	0.997	0.5655	0.0237	0.0291	0.0657	-0.0066	0.0089	0.5472	0.1445	0.0270	0.0657	-0.0127	3.7878
6 292	0.303	14.383	-7.003	0.996	0.6499	0.0266	0.0291	0.0861	-0.0078	0.0037	0.6229	0.1872	0.0263	0.0861	-0.0148	3.3277
6 293	0.303	16.415	-6.870	1.000	0.7470	0.0298	0.0315	0.1056	-0.0095	-0.0015	0.7082	0.2397	0.0275	0.1056	-0.0180	2.9549

Run Point	M_∞	a	β	q_∞	C_N	C_A	C_l	C_m	C_y	C_d	C_L	C_D	C_{l_s}	C_{m_s}	C_{y_s}	C_{d_s}	$C_{l/D}$	
10	329	1.189	-1.1720	-0.023	2.889	-0.0327	0.0097	0.0135	0.0000	0.0000	-0.0324	0.0106	0.0135	0.0135	-3.0418			
10	330	1.189	-1.154	-0.020	2.880	-0.0124	0.0101	0.0003	0.0000	0.0000	-0.0122	0.0116	0.0003	0.0116	-1.1762			
10	331	1.190	-0.160	-0.007	2.888	0.0229	0.0106	0.0004	0.0089	0.0000	-0.0002	0.0230	0.0105	-0.0004	0.0089	0.0000	-1.1762	
10	332	1.190	0.281	-0.005	2.884	0.0390	0.0108	0.0004	0.0004	0.0000	-0.0002	0.0003	0.0389	0.0110	-0.0004	0.0077	3.5492	
10	333	1.189	0.766	-0.005	2.882	0.0570	0.0109	0.0004	0.0004	0.0000	-0.0004	0.0569	0.0117	-0.0004	0.0061	0.0000	4.8755	
10	334	1.189	1.189	-0.007	2.884	0.0973	0.0109	0.0004	0.0004	0.0000	-0.0004	0.0969	0.0139	-0.0004	0.0024	0.0000	6.9470	
10	335	1.189	3.373	-0.012	2.887	0.1612	0.0107	0.0004	0.0004	0.0000	-0.0004	0.0021	0.1603	0.0202	-0.0004	0.0021	0.0000	7.3424
10	336	1.189	4.427	-0.003	2.886	0.2069	0.0120	0.0004	0.0004	0.0000	-0.0001	0.0001	0.2054	0.0280	-0.0004	0.0011	0.0000	7.3424
10	337	1.189	6.657	-0.026	2.884	0.3019	0.0119	0.0004	0.0004	0.0000	-0.0001	0.0001	0.2987	0.0487	-0.0004	0.0002	0.0001	6.1282
10	338	1.188	7.664	-0.026	2.884	0.3439	0.0114	0.0002	0.0002	0.0000	-0.0001	0.0001	0.2989	0.0483	-0.0002	0.0002	0.0008	6.1282
10	339	1.098	-1.992	-0.005	2.785	0.0435	0.0095	0.0002	0.0002	0.0000	-0.0001	0.0163	0.0002	-0.0002	0.0110	0.0001	-3.9358	
10	340	1.099	-1.417	-0.008	2.784	0.0205	0.0100	0.0002	0.0002	0.0000	-0.0002	0.0203	0.0142	-0.0002	0.0163	0.0001	-1.9301	
10	341	1.098	4.112	-0.011	2.786	0.2161	0.0123	0.0003	0.0003	0.0000	-0.0002	0.0001	0.2147	0.0277	-0.0002	0.0029	0.0002	7.7439
10	342	1.098	6.321	-0.027	2.787	0.3153	0.0139	0.0003	0.0003	0.0000	-0.0002	0.0001	0.3119	0.0485	-0.0002	0.0020	0.0001	6.4257
10	343	1.098	7.327	-0.027	2.783	0.3588	0.0146	0.0003	0.0003	0.0000	-0.0002	0.0001	0.3540	0.0603	-0.0002	0.0009	0.0001	5.8746
10	344	1.098	0.574	-0.024	2.783	0.0595	0.0109	0.0002	0.0002	0.0000	-0.0001	0.0111	0.0001	-0.0001	0.040	0.0000	3.5153	
10	345	1.098	1.545	-0.025	2.786	0.0993	0.0109	0.0001	0.0001	0.0000	-0.0001	0.0111	0.0000	-0.0001	0.0135	0.0000	5.1779	
10	346	1.098	3.076	-0.023	2.785	0.1672	0.0111	0.0001	0.0001	0.0000	-0.0006	0.1664	0.0200	-0.0001	0.0030	0.0000	8.3125	
10	347	1.098	4.112	-0.011	2.786	0.2161	0.0123	0.0003	0.0003	0.0000	-0.0002	0.0001	0.2147	0.0277	-0.0002	0.0029	0.0002	7.7439
10	348	1.098	6.321	-0.027	2.787	0.3153	0.0139	0.0003	0.0003	0.0000	-0.0002	0.0001	0.3119	0.0485	-0.0002	0.0020	0.0001	6.4257
10	349	1.098	7.327	-0.027	2.783	0.3588	0.0146	0.0003	0.0003	0.0000	-0.0002	0.0001	0.3540	0.0603	-0.0002	0.0009	0.0001	5.8746
10	350	0.952	-2.079	-0.006	2.571	0.0473	0.0072	0.0002	0.0003	0.0000	-0.0001	0.0140	0.0001	-0.0001	0.0470	0.0003	-5.2864	
10	351	0.951	-1.491	-0.007	2.565	0.0234	0.0078	0.0003	0.0003	0.0000	-0.0001	0.0126	0.0001	-0.0001	0.0126	0.0000	-2.7642	
10	352	0.951	-0.472	-0.004	2.569	0.0172	0.0085	0.0003	0.0003	0.0000	-0.0001	0.0126	0.0001	-0.0001	0.0140	0.0001	-5.2864	
10	353	0.951	-0.026	0.004	2.567	0.0350	0.0086	0.0003	0.0003	0.0000	-0.0001	0.0146	0.0001	-0.0001	0.0090	0.0000	4.0574	
10	354	0.952	0.537	-0.004	2.570	0.0582	0.0087	0.0003	0.0003	0.0000	-0.0001	0.0126	0.0001	-0.0001	0.0092	0.0000	6.2826	
10	355	0.951	1.557	-0.008	2.570	0.1009	0.0087	0.0003	0.0003	0.0000	-0.0001	0.0146	0.0001	-0.0001	0.0048	0.0000	8.8169	
10	356	0.951	3.122	-0.005	2.566	0.1733	0.0004	0.0004	0.0004	0.0000	-0.0001	0.0111	0.0001	-0.0001	0.0004	0.0000	9.3499	
10	357	0.951	4.175	0.007	2.565	0.2252	0.0105	0.0002	0.0002	0.0000	-0.0001	0.0111	0.0001	-0.0001	0.0011	0.0001	8.3234	
10	358	0.951	6.311	-0.011	2.570	0.3302	0.0130	0.0004	0.0004	0.0001	-0.0001	0.0111	0.0001	-0.0001	0.0010	0.0001	6.6422	
10	359	0.950	9.531	-0.005	2.570	0.4739	0.009	0.0002	0.0002	0.0000	-0.0001	0.0160	0.0002	-0.0001	0.0080	0.0001	4.9316	
10	360	0.944	-2.087	-0.007	2.495	0.0434	0.0074	0.0003	0.0003	0.0000	-0.0001	0.0128	0.0002	-0.0001	0.0128	-4.7899		
10	361	0.905	-1.498	-0.012	2.500	0.0209	0.0079	0.0003	0.0003	0.0000	-0.0001	0.0118	0.0002	-0.0001	0.0118	0.0000	-2.4462	
10	362	0.898	-0.481	-0.005	2.476	0.0349	0.0087	0.0004	0.0004	0.0000	-0.0001	0.0183	0.0002	-0.0001	0.0084	0.0000	2.1793	
10	363	0.901	-0.036	-0.004	2.478	0.0570	0.0087	0.0004	0.0004	0.0000	-0.0001	0.0183	0.0002	-0.0001	0.0084	0.0000	4.0259	
10	364	0.902	0.557	-0.004	2.478	0.0580	0.0087	0.0004	0.0004	0.0000	-0.0001	0.0181	0.0002	-0.0001	0.0081	0.0000	6.2344	
10	365	0.899	1.558	-0.005	2.474	0.0978	0.0087	0.0004	0.0004	0.0000	-0.0001	0.0114	0.0002	-0.0001	0.0062	0.0000	8.5806	

Table VII. Force and Moment Data for the Curved Wing Tip Model, Nacelles Off

Table VIII. Continued

Run	Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_n	C_Y	C_L	C_D	C_{ls}	C_{ms}	C_{ns}	L/D
10	366	0.899	3.142	-0.005	2.476	0.1667	0.0090	-0.0004	0.0034	-0.0001	-0.0009	0.1659	0.0181	-0.0004	0.0034	0.0000	9.1579
10	367	0.904	4.205	0.009	2.498	0.2177	0.0104	-0.0001	0.0048	-0.0002	-0.0026	0.2164	0.0263	-0.0001	0.0048	-0.0002	8.2305
10	368	0.904	6.334	-0.007	2.489	0.3191	0.0126	-0.0005	0.0086	0.0001	-0.0012	0.3157	0.0478	-0.0005	0.0086	0.0001	6.6102
10	369	0.901	-2.091	5.044	2.486	-0.0420	0.0076	-0.0010	0.0126	-0.0007	-0.0035	-0.0417	0.0091	-0.0010	0.0126	-0.0008	-4.5819
10	370	0.900	-1.483	5.044	2.480	-0.0188	0.0081	-0.0018	0.0117	-0.0006	-0.0036	-0.0186	0.0086	-0.0018	0.0117	-0.0007	-2.1600
10	371	0.905	-0.444	5.043	2.495	0.0205	0.0087	-0.0035	0.0100	-0.0005	-0.0036	0.0206	0.0086	-0.0035	0.0100	-0.0006	2.4035
10	372	0.900	0.018	5.038	2.481	0.0383	0.0089	-0.0043	0.0095	-0.0005	-0.0036	0.0383	0.0089	-0.0043	0.0095	-0.0005	4.3188
10	373	0.905	0.629	5.031	2.496	0.0621	0.0089	-0.0053	0.0087	-0.0004	-0.0036	0.0620	0.0096	-0.0053	0.0087	-0.0004	6.4902
10	374	0.901	1.683	5.009	2.487	0.1056	0.0089	-0.0071	0.0076	-0.0002	-0.0034	0.1053	0.0120	-0.0071	0.0076	0.0000	8.7913
10	375	0.900	3.338	4.942	2.476	0.1775	0.0094	-0.0095	0.0064	0.0009	-0.0021	0.1767	0.0197	-0.0094	0.0064	0.0014	8.9551
10	376	0.901	4.346	4.901	2.480	0.2202	0.0100	-0.0096	0.0076	0.0016	-0.0017	0.2189	0.0267	-0.0095	0.0076	0.0023	8.2049
10	377	0.902	6.588	4.896	2.493	0.3219	0.0133	-0.0103	0.0155	0.0009	-0.0072	0.3183	0.0502	-0.0101	0.0155	0.0021	6.3456
10	378	0.899	8.770	4.804	2.476	0.4225	0.0155	-0.0127	0.0224	0.0013	-0.0059	0.4152	0.0797	-0.0124	0.0224	0.0032	5.2097
10	379	0.905	-2.103	-5.029	2.499	-0.0440	0.0075	0.0001	0.0127	0.0006	0.0036	-0.0437	0.0091	0.0001	0.0127	0.0006	-4.7895
10	380	0.903	-1.509	-5.030	2.484	-0.0211	0.0080	0.0010	0.0116	0.0005	0.0032	-0.0208	0.0086	0.0009	0.0116	0.0006	-2.4250
10	381	0.903	-0.469	-5.030	2.495	0.0186	0.0087	0.0026	0.0099	0.0005	0.0030	0.0187	0.0085	0.0026	0.0099	0.0005	2.1889
10	382	0.901	-0.276	-5.030	2.483	0.0258	0.0087	0.0028	0.0095	0.0005	0.0030	0.0259	0.0086	0.0028	0.0095	0.0005	3.0169
10	383	0.899	0.600	-5.022	2.475	0.0597	0.0087	0.0043	0.0083	0.0004	0.0027	0.0596	0.0094	0.0043	0.0083	0.0003	6.3600
10	384	0.901	1.646	-5.003	2.479	0.1022	0.0088	0.0059	0.0071	0.0002	0.0020	0.1019	0.0117	0.0059	0.0071	0.0000	8.7183
10	385	0.905	3.290	-4.935	2.498	0.1745	0.0092	0.0083	0.0054	-0.0009	0.0000	0.1737	0.0192	0.0082	0.0054	-0.0013	9.0442
10	386	0.900	4.301	-4.890	2.476	0.2166	0.0097	0.0086	0.0064	-0.0016	-0.0008	0.2153	0.0259	0.0085	0.0064	-0.0023	8.3109
10	387	0.899	6.506	-4.867	2.475	0.3174	0.0129	0.0094	0.0139	-0.0016	0.0040	0.3139	0.0488	0.0092	0.0139	-0.0026	6.4293
10	388	0.904	8.707	-4.777	2.497	0.4245	0.0150	0.0124	0.0185	-0.0017	0.0028	0.4174	0.0791	0.0120	0.0185	-0.0036	5.2795
11	393	0.847	-2.143	-0.008	2.379	-0.0424	0.0076	-0.0004	0.0123	0.0000	-0.0001	-0.0421	0.0092	-0.0004	0.0123	-0.0001	-4.5779
11	394	0.851	-1.615	-0.017	2.390	-0.0230	0.0080	-0.0004	0.0116	0.0000	-0.0003	-0.0228	0.0087	-0.0004	0.0116	0.0000	-2.6343
11	395	0.851	-0.566	-0.019	2.394	0.0162	0.0087	-0.0005	0.0101	0.0000	-0.0003	0.0163	0.0085	-0.0005	0.0101	0.0000	1.9046
11	396	0.849	-0.094	-0.009	2.385	0.0334	0.0089	-0.0005	0.0094	0.0000	-0.0005	0.0334	0.0088	-0.0005	0.0094	0.0000	3.7918
11	397	0.851	0.486	-0.004	2.392	0.0553	0.0089	-0.0005	0.0086	0.0000	-0.0006	0.0553	0.0094	-0.0005	0.0086	0.0000	5.8980
11	398	0.848	1.510	-0.005	2.381	0.0945	0.0088	-0.0006	0.0071	0.0000	-0.0005	0.0943	0.0112	-0.0006	0.0071	0.0000	8.3814
11	399	0.849	3.091	-0.009	2.385	0.1617	0.0090	-0.0006	0.0049	-0.0001	-0.0008	0.1610	0.0177	-0.0006	0.0049	0.0000	9.0827
11	400	0.848	4.103	0.006	2.380	0.2083	0.0101	-0.0002	0.0067	-0.0001	-0.0026	0.2070	0.0250	-0.0002	0.0067	-0.0001	8.2777
11	401	0.850	6.434	-0.009	2.390	0.3174	0.0128	-0.0007	0.0131	0.0001	-0.0012	0.3140	0.0483	-0.0007	0.0131	0.0001	6.5011
11	402	0.847	8.296	-0.012	2.376	0.3994	0.0144	-0.0004	0.0204	0.0000	-0.0013	0.3931	0.0718	-0.0004	0.0204	0.0001	5.4724
11	403	0.850	9.274	-0.012	2.389	0.4442	0.0153	-0.0005	0.0242	0.0000	-0.0015	0.4360	0.0867	-0.0004	0.0242	0.0001	5.0276
11	404	0.802	-2.175	5.042	2.298	-0.0406	0.0077	-0.0011	0.0115	-0.0007	-0.0035	-0.0402	0.0092	-0.0010	0.0115	-0.0007	-4.3642
11	405	0.801	-1.643	5.043	2.291	-0.0208	0.0081	-0.0018	0.0110	-0.0006	-0.0035	-0.0206	0.0087	-0.0018	0.0110	-0.0007	-2.3601

Run Point	M_∞	a	β	q_∞	C_N	C_A	C_L	C_m	C_d	C_{L2}	C_{m2}	C_{ns}	C_{ns2}	L/D
II	406	0.804	-0.557	5.041	2.304	0.0183	0.0034	0.0100	-0.0005	-0.0036	0.0184	0.0086	-0.0005	2.1282
II	407	0.799	-0.149	5.039	2.282	0.0329	0.0089	-0.0041	0.00041	-0.0035	0.0039	0.0093	-0.0003	3.7519
II	408	0.800	0.432	5.033	2.284	0.0540	0.0089	-0.0041	0.00050	-0.0035	0.0039	0.0093	-0.0005	5.7840
II	409	0.802	1.369	5.012	2.298	0.0981	0.0089	-0.0040	0.00041	-0.0035	0.0039	0.0093	-0.0003	8.4572
II	408	0.800	0.432	5.032	2.282	0.0540	0.0089	-0.0041	0.00050	-0.0035	0.0039	0.0093	-0.0003	3.7519
II	407	0.799	-0.149	5.039	2.282	0.0329	0.0089	-0.0041	0.00041	-0.0035	0.0039	0.0093	-0.0003	5.7840
II	410	0.804	3.228	4.947	2.304	0.1662	0.0093	-0.0092	0.0088	0.0001	0.0116	0.0168	-0.0088	8.8804
II	411	0.800	4.255	4.908	2.286	0.2082	0.0097	-0.0092	0.0088	0.0001	0.0106	0.0251	-0.0024	8.2346
II	412	0.802	5.317	4.889	2.297	0.2530	0.0107	-0.0104	0.0138	0.0016	0.0017	0.2509	-0.0341	7.3573
II	413	0.804	8.593	4.804	2.288	0.4045	0.0146	-0.0146	0.0278	0.0013	0.0013	0.3977	-0.0752	5.2873
II	414	0.802	-2.154	0.029	2.293	-0.0415	0.0004	-0.0004	0.0117	0.0001	0.0001	0.3977	-0.0412	4.5595
II	415	0.799	-1.565	0.026	2.283	-0.0201	0.0005	-0.0005	0.0111	0.0001	0.0001	0.0118	-0.0002	2.3075
II	416	0.802	-0.560	0.040	2.299	0.0169	0.0086	-0.0005	0.0099	0.0001	0.0170	0.0084	-0.0005	2.0113
II	417	0.800	-0.120	0.029	2.287	0.0326	0.0088	-0.0003	0.0094	0.0001	0.0077	0.0326	-0.0001	3.7500
II	418	0.803	0.479	0.026	2.286	0.0915	0.0086	-0.0006	0.0088	0.0001	0.0110	0.0913	-0.0006	8.3056
II	419	0.800	1.477	0.029	2.279	0.1554	0.0088	-0.0002	0.0098	0.0001	0.0077	0.1548	-0.0241	8.3210
II	420	0.798	3.036	0.028	2.279	0.0915	0.0086	-0.0006	0.0098	0.0001	0.0170	0.0111	-0.0007	9.0836
II	421	0.803	4.065	0.039	2.296	0.2000	0.0093	-0.0124	0.0133	0.0000	0.0001	0.2953	-0.0446	6.6286
II	422	0.800	6.200	0.025	2.288	0.2984	0.0124	-0.0002	0.0077	0.0001	0.0001	0.0153	-0.0009	9.3210
II	423	0.802	8.240	0.047	2.292	0.3891	0.0142	-0.0234	0.0001	0.0027	0.0698	0.0006	-0.0234	5.4842
II	424	0.801	9.222	0.048	2.294	0.4342	0.0152	-0.0007	0.0279	0.0001	0.0001	0.4261	-0.0846	5.0379
II	425	0.804	-2.184	-5.045	2.304	-0.0419	0.0076	0.0001	0.0115	0.0006	0.0038	-0.0416	0.0001	4.5470
II	426	0.804	-1.605	-5.046	2.305	-0.0207	0.0081	0.0009	0.0005	0.0035	0.0025	-0.0086	0.0109	-0.0005
II	427	0.801	-0.641	-5.039	2.292	0.0139	0.0086	-0.0022	0.0099	0.0004	0.0040	0.0085	-0.0022	1.6466
II	428	0.803	0.492	-5.042	2.301	0.0345	0.0087	-0.0087	0.0004	0.0031	0.0027	0.0542	-0.0092	3.9675
II	429	0.800	0.492	-5.036	2.287	0.0542	0.0087	-0.0087	0.0004	0.0029	0.0027	0.0954	-0.0092	5.9035
II	430	0.804	1.537	-5.019	2.307	0.0957	0.0087	-0.0087	0.0005	0.0055	0.0001	0.0113	-0.0085	0.0001
II	431	0.803	3.353	-4.948	2.299	0.1702	0.0091	-0.0091	0.0001	0.0020	0.0002	0.1694	-0.0190	8.9053
II	432	0.803	4.180	-4.915	2.303	0.2046	0.0094	-0.0094	0.0009	0.0028	0.0022	0.2034	-0.0243	8.3648
II	433	0.801	6.438	-4.860	2.292	0.3060	0.0123	-0.0171	0.0171	0.0002	0.0074	0.0114	-0.0114	4.7719
II	434	0.803	8.499	-4.808	2.301	0.3999	0.0145	-0.0145	0.0130	0.0017	0.0017	0.0734	-0.0091	0.0001
II	435	0.749	-2.239	0.021	2.197	0.1660	0.0086	-0.0086	0.0005	0.0002	0.0002	0.0466	-0.0114	-0.0001
II	436	0.751	-1.572	0.020	2.188	0.0195	0.0080	-0.0080	0.0004	0.0009	0.0009	0.0885	-0.0044	0.0000
II	437	0.753	-0.563	0.021	2.194	0.0300	0.0087	-0.0087	0.0005	0.0009	0.0009	0.0395	-0.0095	0.0000
II	438	0.752	-0.167	0.021	2.199	0.0535	0.0088	-0.0088	0.0001	0.0001	0.0001	0.0534	-0.0092	0.0000
II	439	0.754	0.485	0.020	2.199	0.0535	0.0089	-0.0089	0.0005	0.0005	0.0005	0.0887	-0.0087	5.7766
II	440	0.753	1.453	0.021	2.199	0.0892	0.0087	-0.0087	0.0006	0.0001	0.0001	0.0889	-0.0110	0.0000
II	441	0.751	3.025	0.019	2.188	0.1523	0.0088	-0.0088	0.0006	0.0000	0.0000	0.1516	-0.0168	0.0000

Table VII. Continued

Table VIII. Continued

Run	Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_n	C_Y	C_L	C_D	C_{ls}	C_{ms}	C_{ns}	L/D
11	442	0.754	4.024	0.042	2.202	0.1971	0.0097	-0.0003	0.0085	-0.0001	-0.0019	0.1960	0.0235	-0.0003	0.0085	-0.0001	8.3323
11	443	0.752	6.142	0.029	2.193	0.2911	0.0124	-0.0008	0.0170	0.0000	-0.0009	0.2881	0.0434	-0.0008	0.0170	0.0001	6.6311
11	444	0.752	8.257	0.025	2.195	0.3856	0.0143	-0.0006	0.0257	0.0000	-0.0010	0.3795	0.0695	-0.0006	0.0257	0.0001	5.4609
11	445	0.751	10.152	0.025	2.190	0.4683	0.0163	-0.0006	0.0359	0.0000	-0.0011	0.4581	0.0986	-0.0005	0.0359	0.0001	4.6455
11	446	0.703	-2.185	5.129	2.089	-0.0392	0.0077	-0.0011	0.0109	-0.0007	-0.0036	-0.0389	0.0092	-0.0011	0.0109	-0.0007	-4.2236
11	447	0.697	-1.586	5.129	2.054	-0.0183	0.0082	-0.0019	0.0105	-0.0006	-0.0035	-0.0180	0.0087	-0.0019	0.0105	-0.0006	-2.0617
11	448	0.702	-0.563	5.126	2.083	0.0170	0.0088	-0.0034	0.0099	-0.0005	-0.0034	0.0171	0.0086	-0.0034	0.0099	-0.0005	1.9880
11	449	0.698	-0.182	5.124	2.060	0.0306	0.0088	-0.0040	0.0098	-0.0004	-0.0033	0.0306	0.0087	-0.0040	0.0098	-0.0005	3.5012
11	450	0.702	0.538	5.119	2.083	0.0560	0.0089	-0.0052	0.0096	-0.0004	-0.0033	0.0559	0.0094	-0.0052	0.0096	-0.0003	5.9528
11	451	0.697	1.448	5.102	2.056	0.0895	0.0088	-0.0065	0.0098	-0.0001	-0.0028	0.0892	0.0111	-0.0065	0.0098	0.0001	8.0643
11	452	0.702	3.159	5.042	2.079	0.1573	0.0091	-0.0091	0.0103	0.0011	-0.0012	0.1565	0.0177	-0.0090	0.0103	0.0016	8.8302
11	453	0.704	4.128	5.007	2.091	0.1969	0.0095	-0.0098	0.0120	0.0016	-0.0007	0.1957	0.0236	-0.0096	0.0120	0.0023	8.2824
11	454	0.702	6.290	4.989	2.075	0.2913	0.0126	-0.0116	0.0215	0.0013	-0.0073	0.2882	0.0445	-0.0113	0.0215	0.0026	6.4807
11	455	0.702	8.293	4.925	2.085	0.3795	0.0146	-0.0140	0.0311	0.0013	-0.0068	0.3734	0.0692	-0.0136	0.0311	0.0033	5.3976
11	456	0.699	-2.169	0.006	2.061	-0.0410	0.0076	-0.0004	0.0112	-0.0001	0.0003	-0.0407	0.0091	-0.0004	0.0112	-0.0001	-4.4605
11	457	0.701	-1.616	0.004	2.076	-0.0210	0.0081	-0.0004	0.0107	-0.0001	0.0002	-0.0208	0.0087	-0.0004	0.0107	-0.0001	-2.3954
11	458	0.698	-0.599	0.004	2.062	0.0142	0.0086	-0.0005	0.0100	-0.0001	0.0000	0.0143	0.0084	-0.0005	0.0100	-0.0001	1.6955
11	459	0.698	-0.158	0.005	2.060	0.0297	0.0087	-0.0005	0.0096	-0.0001	0.0000	0.0297	0.0087	-0.0005	0.0096	-0.0001	3.4313
11	460	0.701	0.422	0.004	2.079	0.0506	0.0088	-0.0005	0.0092	0.0000	-0.0002	0.0506	0.0092	-0.0005	0.0092	0.0000	5.4980
11	461	0.702	1.424	0.005	2.079	0.0863	0.0087	-0.0006	0.0084	0.0000	-0.0005	0.0861	0.0109	-0.0006	0.0084	0.0000	7.9323
11	462	0.703	2.965	0.005	2.088	0.1474	0.0087	-0.0007	0.0073	-0.0001	-0.0009	0.1468	0.0163	-0.0007	0.0073	0.0000	8.9939
11	463	0.699	4.019	0.012	2.066	0.1941	0.0096	-0.0004	0.0094	-0.0001	-0.0022	0.1929	0.0232	-0.0004	0.0094	-0.0001	8.3201
11	464	0.704	6.089	0.001	2.088	0.2841	0.0123	-0.0008	0.0182	0.0000	-0.0016	0.2812	0.0423	-0.0008	0.0182	0.0001	6.6407
11	465	0.702	8.108	0.004	2.085	0.3753	0.0142	-0.0007	0.0270	-0.0001	-0.0022	0.3695	0.0669	-0.0007	0.0270	0.0000	5.5205
11	466	0.696	9.997	0.007	2.051	0.4581	0.0162	-0.0006	0.0373	-0.0001	-0.0025	0.4484	0.0955	-0.0006	0.0373	0.0000	4.6971
11	467	0.702	-2.162	-5.133	2.079	-0.0397	0.0077	0.0002	0.0108	0.0005	0.0041	-0.0394	0.0092	0.0002	0.0108	0.0005	-4.3072
11	468	0.700	-1.592	-5.033	2.072	-0.0198	0.0082	0.0009	0.0104	0.0005	0.0037	-0.0196	0.0087	0.0008	0.0104	0.0005	-2.2530
11	469	0.701	-0.615	-5.031	2.075	0.0142	0.0087	0.0022	0.0098	0.0004	0.0032	0.0143	0.0086	0.0022	0.0098	0.0004	1.6754
11	470	0.700	-0.139	-5.029	2.069	0.0307	0.0088	0.0028	0.0095	0.0003	0.0030	0.0307	0.0087	0.0028	0.0095	0.0003	3.5264
11	471	0.701	0.467	-5.026	2.078	0.0521	0.0088	0.0037	0.0092	0.0003	0.0028	0.0520	0.0092	0.0037	0.0092	0.0002	5.6494
11	472	0.701	1.512	-5.009	2.077	0.0908	0.0087	0.0053	0.0092	0.0000	0.0019	0.0905	0.0111	0.0053	0.0092	-0.0001	8.1669
11	473	0.700	3.133	-4.953	2.068	0.1559	0.0089	0.0076	0.0096	-0.0010	-0.0002	0.1552	0.0174	0.0075	0.0096	-0.0015	8.8964
11	474	0.700	4.075	-4.917	2.072	0.1937	0.0093	0.0083	0.0109	-0.0017	-0.0012	0.1925	0.0230	0.0082	0.0109	-0.0023	8.3592
11	475	0.700	6.151	-4.848	2.074	0.2835	0.0109	0.0111	0.0176	-0.0023	-0.0019	0.2807	0.0412	0.0108	0.0176	-0.0035	6.8126
11	476	0.700	8.289	-4.826	2.072	0.3788	0.0142	0.0123	0.0296	-0.0018	0.0035	0.3728	0.0687	0.0119	0.0296	-0.0036	5.4309
11	477	0.701	10.253	-4.741	2.075	0.4684	0.0165	0.0152	0.0405	-0.0019	0.0026	0.4580	0.0996	0.0146	0.0405	-0.0046	4.5964

Table VIII. Continued

Run Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_n	C_Y	C_L	C_D	C_{ls}	C_{ms}	C_{ns}	L/D	
11	478	0.601	-2.174	0.000	1.838	-0.0409	0.0077	-0.0005	0.0107	-0.0001	0.0002	-0.0406	0.0092	-0.0005	0.0107	-0.0001	-4.4105
11	479	0.601	-1.634	-0.003	1.839	-0.0221	0.0081	-0.0005	0.0105	0.0000	0.0001	-0.0219	0.0087	-0.0005	0.0105	0.0000	-2.5179
11	480	0.601	-0.660	-0.003	1.837	0.0116	0.0086	-0.0005	0.0099	0.0000	0.0001	0.0117	0.0085	-0.0005	0.0099	0.0000	1.3767
11	481	0.602	-0.172	-0.003	1.841	0.0283	0.0088	-0.0005	0.0097	0.0000	0.0000	0.0283	0.0087	-0.0005	0.0097	0.0000	3.2438
11	482	0.602	0.338	-0.004	1.842	0.0457	0.0088	-0.0005	0.0094	0.0000	0.0000	0.0457	0.0091	-0.0005	0.0094	0.0000	5.0284
11	483	0.602	1.354	-0.003	1.840	0.0820	0.0087	-0.0006	0.0090	0.0000	-0.0002	0.0818	0.0107	-0.0006	0.0090	0.0000	7.6747
11	484	0.601	2.901	-0.003	1.838	0.1416	0.0086	-0.0006	0.0082	0.0000	-0.0002	0.1410	0.0158	-0.0006	0.0082	0.0000	8.9257
11	485	0.601	3.923	0.002	1.839	0.1853	0.0094	-0.0008	0.0103	-0.0003	-0.0004	0.1842	0.0221	-0.0008	0.0103	-0.0002	8.3393
11	486	0.601	5.900	-0.004	1.838	0.2719	0.0121	-0.0007	0.0195	0.0000	-0.0006	0.2692	0.0400	-0.0007	0.0195	0.0001	6.7296
11	487	0.601	7.858	-0.006	1.836	0.3572	0.0138	-0.0006	0.0286	0.0000	-0.0006	0.3520	0.0625	-0.0006	0.0286	0.0001	5.6325
11	488	0.601	9.723	-0.005	1.837	0.4413	0.0158	-0.0004	0.0388	0.0000	-0.0008	0.4323	0.0901	-0.0004	0.0388	0.0001	4.7953
11	489	0.301	-2.116	5.018	0.985	-0.0383	0.0079	-0.0012	0.0097	-0.0007	-0.0029	-0.0380	0.0094	-0.0012	0.0097	-0.0007	-4.0595
11	490	0.302	-1.066	5.020	0.991	-0.0034	0.0087	-0.0025	0.0098	-0.0005	-0.0028	-0.0032	0.0088	-0.0025	0.0098	-0.0006	-0.3650
11	491	0.301	-0.045	5.017	0.983	0.0300	0.0089	-0.0039	0.0097	-0.0004	-0.0025	0.0300	0.0089	-0.0039	0.0097	-0.0004	3.3832
11	492	0.301	2.006	4.996	0.983	0.1012	0.0088	-0.0070	0.0109	0.0003	-0.0007	0.1008	0.0123	-0.0070	0.0109	0.0005	8.1832
11	493	0.301	4.053	4.956	0.983	0.1783	0.0093	-0.0092	0.0140	0.0017	0.0013	0.1772	0.0218	-0.0091	0.0140	0.0023	8.1130
11	494	0.301	5.953	4.922	0.984	0.2554	0.0105	-0.0112	0.0210	0.0020	0.0021	0.2529	0.0369	-0.0110	0.0210	0.0032	6.8543
11	495	0.301	8.017	4.903	0.987	0.3461	0.0141	-0.0130	0.0352	0.0013	-0.0052	0.3407	0.0622	-0.0127	0.0352	0.0031	5.4767
11	496	0.300	10.135	4.837	0.981	0.4409	0.0162	-0.0167	0.0486	0.0021	-0.0045	0.4312	0.0935	-0.0160	0.0486	0.0050	4.6121
11	497	0.301	12.114	4.770	0.983	0.5273	0.0187	-0.0187	0.0648	0.0026	-0.0032	0.5116	0.1289	-0.0178	0.0648	0.0065	3.9680
11	498	0.301	14.071	4.705	0.982	0.6122	0.0214	-0.0190	0.0836	0.0035	-0.0006	0.5886	0.1696	-0.0175	0.0836	0.0080	3.4710
11	499	0.300	16.079	4.620	0.979	0.7064	0.0240	-0.0209	0.1020	0.0046	0.0023	0.6722	0.2187	-0.0188	0.1020	0.0102	3.0732
11	500	0.300	18.090	4.520	0.978	0.8045	0.0271	-0.0229	0.1217	0.0058	0.0052	0.7563	0.2755	-0.0199	0.1217	0.0126	2.7450
11	501	0.300	-2.094	-0.011	0.979	-0.0391	0.0080	-0.0006	0.0101	-0.0001	0.0006	-0.0388	0.0094	-0.0006	0.0101	-0.0001	-4.1352
11	502	0.300	-1.083	-0.011	0.979	-0.0054	0.0086	-0.0006	0.0100	-0.0001	0.0005	-0.0052	0.0087	-0.0006	0.0100	-0.0001	-0.6008
11	503	0.300	-0.057	-0.012	0.981	0.0286	0.0089	-0.0007	0.0097	-0.0001	0.0004	0.0286	0.0089	-0.0007	0.0097	-0.0001	3.2057
11	504	0.300	1.969	-0.013	0.980	0.0983	0.0088	-0.0008	0.0095	-0.0001	-0.0001	0.0980	0.0122	-0.0008	0.0095	0.0000	8.0548
11	505	0.300	3.983	-0.010	0.976	0.1754	0.0093	-0.0007	0.0113	-0.0002	-0.0007	0.1743	0.0215	-0.0007	0.0113	-0.0002	8.1120
11	506	0.300	5.915	-0.012	0.977	0.2605	0.0121	-0.0009	0.0219	0.0000	-0.0010	0.2579	0.0389	-0.0009	0.0219	0.0001	6.6374
11	507	0.299	7.924	-0.012	0.974	0.3458	0.0138	-0.0008	0.0325	-0.0001	-0.0013	0.3406	0.0614	-0.0008	0.0325	0.0001	5.5514
11	508	0.300	10.035	-0.012	0.979	0.4387	0.0161	-0.0007	0.0457	-0.0001	-0.0020	0.4292	0.0923	-0.0007	0.0457	0.0000	4.6494
11	509	0.300	11.982	-0.012	0.976	0.5219	0.0184	-0.0008	0.0618	-0.0002	-0.0024	0.5067	0.1263	-0.0008	0.0618	0.0000	4.0104
11	510	0.300	13.911	-0.014	0.977	0.6077	0.0209	-0.0011	0.0782	-0.0002	-0.0028	0.5849	0.1664	-0.0011	0.0782	0.0001	3.5151
11	511	0.300	15.913	-0.014	0.977	0.7021	0.0235	-0.0012	0.0962	-0.0002	-0.0031	0.6688	0.2151	-0.0012	0.0962	0.0001	3.1095
11	512	0.300	17.913	-0.015	0.976	0.8004	0.0263	-0.0012	0.1148	-0.0003	-0.0035	0.7535	0.2712	-0.0013	0.1148	0.0001	2.7782
11	513	0.300	-2.110	-5.021	0.977	-0.0389	0.0079	0.0001	0.0098	0.0005	0.0046	-0.0386	0.0093	0.0001	0.0098	0.0005	-4.1417

Table VIII. Concluded

Run	Point	M_∞	α	β	q_∞	C_N	C_A	C_l	C_m	C_n	C_Y	C_L	C_D	C_{ls}	C_{ms}	C_{ns}	L/D
11	514	0.300	-1.066	-5.023	0.977	-0.0041	0.0087	0.0013	0.0097	0.0004	0.0040	-0.0039	0.0088	0.0013	0.0097	0.0004	-0.4507
11	515	0.300	-0.061	-5.020	0.977	0.0288	0.0090	0.0027	0.0095	0.0003	0.0037	0.0288	0.0090	0.0027	0.0095	0.0003	3.2023
11	516	0.300	2.008	-5.003	0.977	0.1004	0.0088	0.0055	0.0106	-0.0003	0.0017	0.1000	0.0123	0.0055	0.0106	-0.0005	8.1309
11	517	0.300	4.054	-4.960	0.979	0.1780	0.0091	0.0079	0.0134	-0.0019	-0.0015	0.1769	0.0217	0.0077	0.0134	-0.0024	8.1490
11	518	0.300	5.941	-4.916	0.978	0.2544	0.0100	0.0102	0.0190	-0.0030	-0.0034	0.2520	0.0363	0.0098	0.0190	-0.0040	6.9443
11	519	0.300	7.962	-4.859	0.977	0.3401	0.0122	0.0127	0.0303	-0.0043	-0.0057	0.3352	0.0592	0.0120	0.0303	-0.0060	5.6602
11	520	0.300	10.136	-4.845	0.978	0.4414	0.0162	0.0149	0.0481	-0.0021	0.0025	0.4317	0.0936	0.0143	0.0481	-0.0047	4.6102
11	521	0.300	12.096	-4.779	0.975	0.5294	0.0186	0.0175	0.0638	-0.0027	0.0005	0.5138	0.1291	0.0166	0.0638	-0.0063	3.9793
11	522	0.299	14.063	-4.718	0.975	0.6139	0.0212	0.0171	0.0830	-0.0037	-0.0026	0.5903	0.1698	0.0157	0.0830	-0.0078	3.4773
11	523	0.300	16.052	-4.633	0.976	0.7063	0.0240	0.0188	0.1014	-0.0049	-0.0063	0.6722	0.2184	0.0167	0.1014	-0.0099	3.0780
11	524	0.300	18.085	-4.538	0.977	0.8048	0.0268	0.0206	0.1208	-0.0061	-0.0090	0.7567	0.2753	0.0177	0.1208	-0.0122	2.7484
11	525	0.300	-2.119	-7.523	0.978	-0.0378	0.0080	0.0004	0.0094	0.0008	0.0066	-0.0375	0.0094	0.0004	0.0094	0.0008	-4.0079
11	526	0.301	-1.079	-7.524	0.981	-0.0031	0.0087	0.0022	0.0096	0.0007	0.0059	-0.0030	0.0087	0.0022	0.0096	0.0007	-0.3388
11	527	0.301	-0.038	-7.522	0.983	0.0310	0.0091	0.0043	0.0100	0.0005	0.0054	0.0310	0.0090	0.0043	0.0100	0.0005	3.4325
11	528	0.300	2.059	-7.503	0.980	0.1042	0.0090	0.0086	0.0118	-0.0003	0.0029	0.1038	0.0128	0.0085	0.0118	-0.0006	8.1441
11	529	0.299	4.111	-7.440	0.974	0.1821	0.0091	0.0126	0.0149	-0.0024	-0.0010	0.1810	0.0221	0.0124	0.0149	-0.0033	8.1846
11	530	0.300	6.026	-7.369	0.977	0.2561	0.0096	0.0154	0.0212	-0.0045	-0.0044	0.2537	0.0364	0.0148	0.0212	-0.0061	6.9649
11	531	0.300	8.075	-7.296	0.978	0.3475	0.0128	0.0189	0.0326	-0.0061	-0.0016	0.3423	0.0615	0.0179	0.0326	-0.0087	5.5626
11	532	0.300	10.248	-7.190	0.977	0.4438	0.0157	0.0228	0.0496	-0.0083	-0.0026	0.4340	0.0945	0.0210	0.0496	-0.0122	4.5941
11	533	0.300	12.258	-7.152	0.975	0.5385	0.0191	0.0264	0.0681	-0.0046	0.0001	0.5222	0.1330	0.0248	0.0681	-0.0101	3.9259
11	534	0.299	14.230	-7.061	0.974	0.6191	0.0217	0.0265	0.0881	-0.0057	-0.0039	0.5948	0.1732	0.0242	0.0881	-0.0121	3.4341
11	535	0.300	16.257	-6.933	0.977	0.7152	0.0247	0.0287	0.1082	-0.0075	-0.0091	0.6796	0.2240	0.0254	0.1082	-0.0152	3.0348
11	536	0.300	18.310	-6.791	0.976	0.8145	0.0277	0.0312	0.1292	-0.0094	-0.0143	0.7646	0.2822	0.0267	0.1292	-0.0187	2.7095

Table IX. Run Log - Pressure Data

(a) Nacelles On

Run	Point	Mach	α	Run	Point	Mach	α	Run	Point	Mach	α
3.000	12.000	1.193	-2.169	3.000	13.000	1.193	-1.647	3.000	14.000	1.193	-0.477
3.000	15.000	1.193	-0.048	3.000	16.000	1.193	0.603	3.000	17.000	1.193	1.692
3.000	18.000	1.193	3.478	3.000	19.000	1.193	4.523	3.000	20.000	1.193	6.887
3.000	21.000	1.193	7.931	3.000	22.000	1.104	-2.442	3.000	23.000	1.104	-1.871
3.000	24.000	1.104	-0.684	3.000	25.000	1.104	-0.255	3.000	26.000	1.104	0.410
3.000	27.000	1.104	1.487	3.000	28.000	1.105	3.219	3.000	29.000	1.104	4.348
3.000	30.000	1.103	6.696	3.000	31.000	1.102	7.777	3.000	32.000	0.956	-2.451
3.000	33.000	0.956	-1.894	3.000	34.000	0.956	-0.735	3.000	35.000	0.956	-0.260
3.000	36.000	0.956	0.396	3.000	37.000	0.956	1.501	3.000	38.000	0.956	3.235
3.000	39.000	0.956	4.314	3.000	40.000	0.955	6.604	3.000	41.000	0.956	8.739
3.000	42.000	0.902	-2.458	3.000	43.000	0.901	-1.918	3.000	44.000	0.901	-0.752
3.000	45.000	0.904	-0.296	3.000	46.000	0.904	0.345	3.000	47.000	0.902	1.450
3.000	48.000	0.899	3.264	3.000	49.000	0.904	4.267	3.000	50.000	0.905	6.516
3.000	51.000	0.900	8.678	3.000	52.000	0.856	-2.436	3.000	53.000	0.856	-1.890
3.000	54.000	0.855	-0.764	3.000	55.000	0.856	-0.309	3.000	56.000	0.855	0.280
3.000	57.000	0.855	1.443	3.000	58.000	0.854	3.160	3.000	59.000	0.855	4.294
3.000	60.000	0.853	6.463	3.000	61.000	0.853	8.572	3.000	62.000	0.854	9.575
3.000	63.000	0.804	-2.486	3.000	64.000	0.803	-1.932	3.000	65.000	0.803	-0.786
3.000	66.000	0.803	-0.306	3.000	67.000	0.802	0.298	3.000	68.000	0.803	1.371
3.000	69.000	0.801	3.082	3.000	70.000	0.802	4.133	3.000	71.000	0.802	6.370
3.000	72.000	0.802	8.435	3.000	73.000	0.804	8.884	3.000	74.000	0.750	-2.445
3.000	75.000	0.750	-1.874	3.000	76.000	0.750	-0.844	3.000	77.000	0.750	-0.358
3.000	78.000	0.750	0.276	3.000	79.000	0.750	1.297	3.000	80.000	0.749	3.009
3.000	81.000	0.750	4.025	3.000	82.000	0.750	6.207	3.000	83.000	0.750	8.285
3.000	84.000	0.750	8.771	3.000	85.000	0.703	-2.458	3.000	86.000	0.702	-1.856
3.000	87.000	0.702	-0.827	3.000	88.000	0.702	-0.320	3.000	89.000	0.703	0.265
3.000	90.000	0.702	1.292	3.000	91.000	0.702	2.986	3.000	92.000	0.703	4.009
3.000	93.000	0.703	6.100	3.000	94.000	0.702	8.193	3.000	95.000	0.703	8.572
3.000	96.000	0.601	-2.447	3.000	97.000	0.602	-1.905	3.000	98.000	0.602	-0.794
3.000	99.000	0.602	-0.350	3.000	100.000	0.604	0.213	3.000	101.000	0.601	1.252
3.000	102.000	0.603	2.870	3.000	103.000	0.602	3.889	3.000	104.000	0.602	5.912
3.000	105.000	0.603	7.871	3.000	106.000	0.601	9.705	3.000	107.000	0.305	-2.085
3.000	108.000	0.305	-1.018	3.000	109.000	0.305	0.036	3.000	110.000	0.305	2.199
3.000	111.000	0.305	4.401	3.000	112.000	0.305	5.819	3.000	113.000	0.304	7.875
3.000	114.000	0.305	9.946	3.000	115.000	0.305	11.924	3.000	116.000	0.305	13.882
3.000	117.000	0.305	15.853	3.000	118.000	0.304	17.782				

Table IX. Concluded

(b) Nacelles Off

Run	Point	Mach	α	Run	Point	Mach	α	Run	Point	Mach	α
4.000	122.000	1.194	-2.140	4.000	123.000	1.194	-1.599	4.000	124.000	1.194	-0.531
4.000	125.000	1.195	-0.046	4.000	126.000	1.195	0.592	4.000	127.000	1.194	1.626
4.000	128.000	1.194	3.338	4.000	129.000	1.194	4.294	4.000	130.000	1.193	6.916
4.000	131.000	1.193	7.597	4.000	132.000	1.107	-2.459	4.000	133.000	1.104	-1.909
4.000	134.000	1.104	-0.793	4.000	135.000	1.105	-0.375	4.000	136.000	1.104	0.299
4.000	137.000	1.104	1.458	4.000	138.000	1.104	3.190	4.000	139.000	1.103	4.300
4.000	140.000	1.103	6.697	4.000	141.000	1.104	7.692	5.000	145.000	0.953	-2.513
5.000	146.000	0.953	-1.247	5.000	147.000	0.953	0.014	5.000	148.000	0.953	0.319
5.000	151.000	0.954	1.453	5.000	152.000	0.954	3.256	5.000	153.000	0.953	4.246
5.000	154.000	0.953	6.646	5.000	155.000	0.952	8.763	5.000	156.000	0.902	-2.490
5.000	157.000	0.896	-1.847	5.000	158.000	0.901	-0.795	5.000	159.000	0.896	-0.347
5.000	160.000	0.899	0.304	5.000	161.000	0.902	1.416	5.000	162.000	0.897	3.090
5.000	163.000	0.899	4.154	5.000	164.000	0.901	6.469	5.000	165.000	0.904	8.795
5.000	166.000	0.848	-2.466	5.000	167.000	0.848	-1.853	5.000	168.000	0.847	-0.782
5.000	169.000	0.848	-0.317	5.000	170.000	0.847	0.219	5.000	171.000	0.850	1.408
5.000	172.000	0.848	3.078	5.000	173.000	0.849	4.169	5.000	174.000	0.850	6.354
5.000	175.000	0.850	8.522	5.000	176.000	0.847	9.520	5.000	177.000	0.801	-2.461
5.000	178.000	0.800	-1.850	5.000	179.000	0.800	-0.807	5.000	180.000	0.800	-0.334
5.000	181.000	0.800	0.214	5.000	182.000	0.801	1.365	5.000	183.000	0.800	3.036
5.000	184.000	0.801	4.095	5.000	185.000	0.801	6.288	5.000	186.000	0.801	8.423
5.000	187.000	0.801	8.842	5.000	188.000	0.751	-2.449	5.000	189.000	0.751	-1.841
5.000	190.000	0.752	-0.811	5.000	191.000	0.750	-0.358	5.000	192.000	0.751	0.249
5.000	193.000	0.751	1.332	5.000	194.000	0.750	3.003	5.000	195.000	0.751	4.004
5.000	196.000	0.751	4.845	5.000	197.000	0.750	8.244	5.000	198.000	0.751	8.648
5.000	199.000	0.702	-2.434	5.000	200.000	0.702	-1.841	5.000	201.000	0.701	-0.814
5.000	202.000	0.701	-0.338	5.000	203.000	0.701	0.156	5.000	204.000	0.700	1.317
5.000	205.000	0.701	2.934	5.000	206.000	0.701	3.917	5.000	207.000	0.700	6.088
5.000	208.000	0.702	8.130	5.000	209.000	0.701	8.538	5.000	210.000	0.600	-2.440
5.000	211.000	0.600	-1.850	5.000	212.000	0.600	-0.846	5.000	213.000	0.600	-0.382
5.000	214.000	0.600	0.187	5.000	215.000	0.600	1.255	5.000	216.000	0.600	2.834
5.000	217.000	0.601	3.830	5.000	218.000	0.600	5.866	5.000	219.000	0.601	7.859
5.000	220.000	0.600	8.228	5.000	221.000	0.303	-2.409	5.000	222.000	0.302	-1.265
5.000	223.000	0.303	-0.232	5.000	224.000	0.303	1.851	5.000	225.000	0.303	3.925
5.000	226.000	0.302	5.825	5.000	227.000	0.302	7.857	5.000	228.000	0.302	9.964
5.000	229.000	0.302	11.900	5.000	230.000	0.302	13.822	5.000	231.000	0.302	15.844
5.000	232.000	0.302	17.778								

Table X. Pressure Coefficient Data

Orifice Name	Point 12.	Point 13.	Point 14.	Point 15.	Point 16.	Point 17.	Point 18.	Point 19.	Point 20.	Point 21.	Point 22.	Point 23.	Point 24.	Point 25.	Point 26.
CP1	0.021	0.015	0.006	0.003	-0.003	-0.016	-0.030	-0.047	-0.076	-0.087	0.019	0.013	0.004	0.001	-0.002
CP2	-0.077	-0.080	-0.086	-0.087	-0.092	-0.098	-0.110	-0.124	-0.156	-0.170	-0.111	-0.116	-0.122	-0.124	-0.127
CP3	0.023	0.020	0.012	0.008	0.000	-0.016	-0.024	-0.043	-0.088	-0.109	0.027	0.020	0.011	0.007	0.000
CP4	0.017	0.012	0.003	-0.002	-0.013	-0.042	-0.087	-0.094	-0.137	-0.164	0.020	0.013	0.002	-0.003	-0.012
CP5	-0.002	-0.004	-0.014	-0.018	-0.028	-0.047	-0.111	-0.179	-0.321	-0.353	0.003	-0.003	-0.014	-0.020	-0.026
CP7	0.029	0.018	-0.015	-0.028	-0.051	-0.093	-0.161	-0.191	-0.216	-0.243	0.035	0.022	-0.011	-0.026	-0.052
CP8	-0.003	-0.014	-0.037	-0.043	-0.057	-0.089	-0.100	-0.208	-0.274	-0.318	0.011	0.001	-0.024	-0.032	-0.049
CP9	0.017	0.013	-0.002	-0.005	-0.004	-0.019	-0.064	-0.145	-0.264	-0.297	0.018	0.011	-0.007	-0.012	-0.008
CP10	-0.001	-0.005	-0.011	-0.013	-0.016	-0.028	-0.064	-0.193	-0.252	-0.281	0.004	-0.002	-0.009	-0.012	-0.017
CP11	0.016	0.012	0.003	0.002	-0.002	-0.009	-0.027	-0.036	-0.065	-0.078	0.027	0.021	0.014	0.012	0.009
CP12	0.016	0.014	0.007	0.005	0.002	-0.006	-0.019	-0.028	-0.067	-0.085	0.026	0.023	0.017	0.014	0.012
CP13	0.032	0.029	0.024	0.023	0.020	0.015	-0.009	-0.006	-0.052	-0.073	0.040	0.037	0.033	0.031	0.029
CP14	0.013	0.012	0.003	0.001	-0.002	-0.004	-0.026	-0.019	-0.066	-0.088	0.019	0.015	0.010	0.007	0.007
CP16	0.011	0.007	-0.005	-0.009	-0.015	-0.037	-0.108	-0.144	-0.185	-0.232	0.019	0.012	0.004	0.000	-0.006
CP17	-0.012	-0.016	-0.026	-0.029	-0.036	-0.050	-0.088	-0.246	-0.309	-0.328	-0.006	-0.011	-0.018	-0.022	-0.027
CP18	-0.015	-0.024	-0.036	-0.037	-0.043	-0.051	-0.081	-0.182	-0.215	-0.232	-0.006	-0.017	-0.029	-0.031	-0.035
CP20	-0.003	-0.016	-0.048	-0.060	-0.076	-0.104	-0.133	-0.122	-0.187	-0.207	-0.002	-0.018	-0.047	-0.059	-0.077
CP21	0.013	0.000	-0.033	-0.046	-0.067	-0.105	-0.143	-0.127	-0.187	-0.216	0.015	-0.002	-0.034	-0.048	-0.070
CP22	-0.008	-0.013	-0.026	-0.030	-0.036	-0.052	-0.093	-0.221	-0.288	-0.320	-0.026	-0.031	-0.043	-0.048	-0.054
CP23	0.002	-0.002	-0.015	-0.018	-0.026	-0.048	-0.093	-0.124	-0.194	-0.224	-0.021	-0.025	-0.036	-0.041	-0.047
CP24	-0.024	-0.027	-0.034	-0.036	-0.039	-0.045	-0.059	-0.074	-0.104	-0.118	-0.040	-0.042	-0.036	-0.036	-0.041
CP25	-0.007	-0.010	-0.018	-0.020	-0.023	-0.030	-0.047	-0.069	-0.101	-0.117	-0.021	-0.024	-0.020	-0.019	-0.026
CP26	-0.017	-0.021	-0.030	-0.032	-0.037	-0.047	-0.074	-0.089	-0.132	-0.150	-0.029	-0.033	-0.038	-0.038	-0.041
CP27	-0.008	-0.012	-0.019	-0.019	-0.024	-0.032	-0.061	-0.080	-0.113	-0.129	-0.024	-0.028	-0.033	-0.033	-0.035
CP28	-0.012	-0.017	-0.029	-0.032	-0.036	-0.044	-0.079	-0.089	-0.133	-0.152	-0.024	-0.030	-0.039	-0.042	-0.044
CP29	0.001	-0.004	-0.019	-0.026	-0.040	-0.061	-0.100	-0.087	-0.151	-0.177	-0.009	-0.016	-0.032	-0.037	-0.049
CP30	-0.007	-0.011	-0.027	-0.031	-0.041	-0.069	-0.118	-0.121	-0.208	-0.234	-0.019	-0.026	-0.041	-0.045	-0.052
CP31	-0.002	-0.007	-0.023	-0.028	-0.038	-0.062	-0.098	-0.164	-0.243	-0.267	-0.015	-0.023	-0.039	-0.043	-0.049
CP32	-0.012	-0.019	-0.038	-0.044	-0.057	-0.083	-0.113	-0.235	-0.275	-0.296	-0.028	-0.038	-0.057	-0.061	-0.068

Table X. Continued

Orifice Name	Point 12.	Point 13.	Point 14.	Point 15.	Point 16.	Point 17.	Point 18.	Point 19.	Point 20.	Point 21.	Point 22.	Point 23.	Point 24.	Point 25.	Point 26.
CP33	0.002	-0.006	-0.037	-0.043	-0.053	-0.080	-0.164	-0.180	-0.238	-0.266	-0.013	-0.024	-0.060	-0.063	-0.063
CP34	0.000	-0.016	-0.051	-0.062	-0.082	-0.092	-0.165	-0.168	-0.236	-0.270	-0.019	-0.037	-0.077	-0.086	-0.098
CP35	-0.003	-0.020	-0.065	-0.079	-0.102	-0.128	-0.161	-0.196	-0.240	-0.270	-0.026	-0.045	-0.094	-0.108	-0.123
CP36	-0.010	-0.032	-0.083	-0.102	-0.132	-0.176	-0.184	-0.189	-0.240	-0.267	-0.037	-0.061	-0.116	-0.136	-0.160
CP37	3.830	3.820	3.815	3.801	3.796	3.787	3.780	3.775	3.740	3.732	3.621	3.615	3.607	3.602	3.598
CP39	-0.026	-0.046	-0.096	-0.114	-0.145	-0.193	-0.274	-0.461	-0.621	-0.648	-0.014	-0.044	-0.101	-0.124	-0.160
CP40	-0.047	-0.065	-0.105	-0.124	-0.151	-0.198	-0.254	-0.390	-0.626	-0.671	-0.042	-0.066	-0.110	-0.130	-0.169
CP41	-0.065	-0.085	-0.140	-0.152	-0.174	-0.213	-0.260	-0.323	-0.630	-0.694	-0.080	-0.101	-0.145	-0.163	-0.190
CP42	-0.060	-0.077	-0.109	-0.123	-0.143	-0.172	-0.217	-0.226	-0.544	-0.647	-0.046	-0.067	-0.112	-0.127	-0.148
CP43	-0.081	-0.095	-0.142	-0.155	-0.174	-0.203	-0.230	-0.246	-0.325	-0.487	-0.085	-0.105	-0.145	-0.160	-0.178
CP44	-0.293	-0.293	-0.289	-0.290	-0.291	-0.287	-0.284	-0.291	-0.285	-0.284	-0.470	-0.467	-0.467	-0.467	-0.465
CP45	0.065	0.074	0.101	0.111	0.122	0.139	0.174	0.196	0.259	0.282	0.127	0.134	0.154	0.164	0.182
CP46	0.071	0.082	0.110	0.120	0.131	0.150	0.187	0.208	0.270	0.294	0.135	0.143	0.164	0.175	0.192
CP47	0.085	0.098	0.131	0.141	0.154	0.174	0.209	0.231	0.291	0.315	0.161	0.169	0.193	0.204	0.221
CP48	0.030	0.050	0.088	0.101	0.116	0.138	0.174	0.196	0.258	0.284	0.120	0.131	0.159	0.170	0.189
CP49	-0.026	-0.006	0.037	0.051	0.070	0.097	0.138	0.164	0.231	0.260	0.066	0.082	0.119	0.132	0.153
CP50	-0.065	-0.059	-0.038	-0.021	0.005	0.038	0.073	0.091	0.145	0.180	-0.044	-0.035	-0.010	-0.003	0.007
CP51	-0.012	-0.019	-0.004	0.008	0.023	0.045	0.075	0.091	0.144	0.176	-0.020	-0.026	-0.009	-0.001	0.008
CP52	0.001	-0.004	0.001	0.009	0.022	0.039	0.067	0.085	0.138	0.168	-0.025	-0.030	-0.015	-0.008	0.003
CP53	0.007	0.003	0.008	0.015	0.026	0.044	0.073	0.090	0.143	0.171	-0.023	-0.022	-0.007	0.000	0.012
CP54	-0.009	-0.012	-0.006	0.001	0.012	0.031	0.061	0.078	0.130	0.157	-0.043	-0.035	-0.021	-0.014	0.000
CP55	-0.015	-0.020	-0.012	-0.005	0.008	0.026	0.057	0.075	0.124	0.151	-0.050	-0.039	-0.022	-0.015	-0.004
CP56	0.014	0.012	0.021	0.027	0.038	0.060	0.092	0.108	0.149	0.167	-0.043	-0.034	-0.014	-0.007	0.003
CP57	0.023	0.021	0.031	0.038	0.049	0.070	0.104	0.121	0.161	0.179	-0.030	-0.020	-0.001	0.006	0.016
CP58	-0.003	-0.003	0.007	0.014	0.025	0.048	0.081	0.098	0.137	0.154	-0.055	-0.046	-0.024	-0.019	-0.008
CP60	0.026	0.027	0.038	0.047	0.060	0.085	0.119	0.136	0.173	0.191	-0.016	-0.006	0.015	0.022	0.033
CP61	-0.436	-0.436	-0.436	-0.432	-0.436	-0.443	-0.448	-0.452	-0.463	-0.469	-0.459	-0.463	-0.471	-0.476	-0.485
CP62	-0.161	-0.162	-0.145	-0.159	-0.156	-0.151	-0.143	-0.138	-0.113	-0.099	-0.185	-0.182	-0.183	-0.181	-0.172
CP63	-0.130	-0.137	-0.137	-0.140	-0.137	-0.133	-0.133	-0.135	-0.138	-0.138	-0.162	-0.169	-0.180	-0.182	-0.181
CP64	-0.137	-0.145	-0.146	-0.149	-0.145	-0.133	-0.135	-0.133	-0.129	-0.131	-0.166	-0.174	-0.188	-0.189	-0.185
CP65	-0.016	-0.023	-0.040	-0.045	-0.054	-0.067	-0.091	-0.105	-0.129	-0.130	-0.051	-0.058	-0.068	-0.073	-0.080

Table X. Continued

Orifice Name	Point 27.	Point 28.	Point 29.	Point 30.	Point 31.	Point 32.	Point 33.	Point 34.	Point 35.	Point 36.	Point 37.	Point 38.	Point 39.	Point 40.	Point 41.
CP1	-0.008	-0.028	-0.046	-0.080	-0.098	0.007	0.003	-0.004	-0.009	-0.012	-0.020	-0.038	-0.057	-0.096	-0.141
CP2	-0.134	-0.148	-0.162	-0.198	-0.217	-0.173	-0.177	-0.179	-0.180	-0.182	-0.188	-0.205	-0.223	-0.265	-0.313
CP3	-0.009	-0.026	-0.041	-0.086	-0.110	0.015	0.011	0.002	-0.004	-0.012	-0.021	-0.042	-0.060	-0.107	-0.158
CP4	-0.037	-0.092	-0.098	-0.135	-0.163	0.009	0.004	-0.007	-0.013	-0.022	-0.047	-0.103	-0.124	-0.166	-0.219
CP5	-0.043	-0.109	-0.186	-0.325	-0.369	-0.008	-0.013	-0.024	-0.030	-0.036	-0.053	-0.113	-0.190	-0.368	-0.446
CP7	-0.109	-0.138	-0.197	-0.226	-0.253	0.028	0.016	-0.017	-0.034	-0.058	-0.113	-0.132	-0.233	-0.251	-0.320
CP8	-0.079	-0.087	-0.220	-0.288	-0.334	-0.003	-0.012	-0.032	-0.041	-0.056	-0.087	-0.093	-0.227	-0.305	-0.396
CP9	-0.019	-0.060	-0.159	-0.269	-0.307	-0.002	-0.009	-0.027	-0.035	-0.033	-0.041	-0.075	-0.112	-0.280	-0.354
CP10	-0.031	-0.065	-0.210	-0.261	-0.289	-0.010	-0.019	-0.029	-0.034	-0.040	-0.054	-0.091	-0.161	-0.297	-0.349
CP11	0.002	-0.014	-0.026	-0.058	-0.073	0.015	0.011	0.003	0.000	-0.003	-0.009	-0.020	-0.029	-0.049	-0.059
CP12	0.007	-0.013	-0.021	-0.062	-0.081	0.014	0.009	0.002	-0.001	-0.005	-0.009	-0.023	-0.032	-0.058	-0.079
CP13	0.023	0.001	-0.003	-0.046	-0.065	0.026	0.022	0.016	0.012	0.008	0.002	-0.018	-0.024	-0.050	-0.075
CP14	0.003	-0.016	-0.016	-0.060	-0.079	0.007	0.003	-0.007	-0.010	-0.014	-0.018	-0.038	-0.042	-0.067	-0.088
CP16	-0.028	-0.104	-0.139	-0.189	-0.226	0.006	0.002	-0.009	-0.015	-0.021	-0.045	-0.127	-0.176	-0.194	-0.258
CP17	-0.042	-0.079	-0.254	-0.325	-0.336	-0.016	-0.022	-0.031	-0.036	-0.044	-0.058	-0.104	-0.196	-0.333	-0.380
CP18	-0.043	-0.076	-0.185	-0.210	-0.234	-0.013	-0.020	-0.038	-0.040	-0.046	-0.056	-0.100	-0.186	-0.209	-0.250
CP20	-0.101	-0.127	-0.124	-0.191	-0.216	-0.003	-0.016	-0.045	-0.061	-0.081	-0.108	-0.113	-0.148	-0.211	-0.266
CP21	-0.107	-0.139	-0.128	-0.198	-0.227	0.012	0.000	-0.031	-0.048	-0.070	-0.113	-0.132	-0.153	-0.223	-0.290
CP22	-0.069	-0.103	-0.223	-0.284	-0.325	-0.019	-0.025	-0.035	-0.041	-0.047	-0.062	-0.118	-0.225	-0.277	-0.358
CP23	-0.069	-0.110	-0.132	-0.218	-0.256	0.019	0.011	-0.005	-0.012	-0.021	-0.042	-0.112	-0.152	-0.187	-0.252
CP24	-0.050	-0.063	-0.073	-0.097	-0.111	-0.006	-0.016	-0.036	-0.046	-0.056	-0.075	-0.091	-0.100	-0.122	-0.145
CP25	-0.036	-0.051	-0.063	-0.094	-0.117	0.014	0.005	-0.015	-0.024	-0.035	-0.054	-0.072	-0.082	-0.116	-0.154
CP26	-0.052	-0.076	-0.081	-0.128	-0.149	0.006	-0.004	-0.025	-0.035	-0.047	-0.069	-0.091	-0.096	-0.146	-0.194
CP27	-0.044	-0.065	-0.075	-0.112	-0.123	-0.008	-0.017	-0.034	-0.042	-0.052	-0.073	-0.091	-0.097	-0.143	-0.175
CP28	-0.054	-0.075	-0.080	-0.129	-0.141	0.002	-0.009	-0.031	-0.041	-0.055	-0.074	-0.097	-0.095	-0.150	-0.189
CP29	-0.076	-0.096	-0.077	-0.151	-0.173	0.014	0.003	-0.023	-0.037	-0.059	-0.095	-0.132	-0.100	-0.175	-0.231
CP30	-0.085	-0.121	-0.114	-0.205	-0.241	0.001	-0.009	-0.035	-0.047	-0.062	-0.100	-0.182	-0.158	-0.234	-0.301
CP31	-0.073	-0.102	-0.159	-0.247	-0.280	0.004	-0.008	-0.033	-0.043	-0.059	-0.092	-0.160	-0.214	-0.274	-0.339
CP32	-0.093	-0.115	-0.248	-0.286	-0.316	-0.013	-0.026	-0.053	-0.066	-0.081	-0.115	-0.183	-0.287	-0.325	-0.397

Table X. Continued

Orifice Name	Point 27.	Point 28.	Point 29.	Point 30.	Point 31.	Point 32.	Point 33.	Point 34.	Point 35.	Point 36.	Point 37.	Point 38.	Point 39.	Point 40.	Point 41.
CP33	-0.089	-0.170	-0.210	-0.242	-0.268	0.001	-0.014	-0.044	-0.058	-0.076	-0.114	-0.171	-0.246	-0.300	-0.373
CP34	-0.096	-0.189	-0.180	-0.231	-0.251	0.002	-0.024	-0.067	-0.086	-0.108	-0.131	-0.158	-0.226	-0.298	-0.341
CP35	-0.131	-0.178	-0.179	-0.225	-0.253	-0.007	-0.032	-0.086	-0.111	-0.131	-0.167	-0.170	-0.233	-0.294	-0.340
CP36	-0.187	-0.174	-0.173	-0.222	-0.257	-0.014	-0.044	-0.107	-0.139	-0.178	-0.233	-0.244	-0.229	-0.284	-0.342
CP37	3.580	3.567	3.553	3.547	3.544	3.469	3.462	3.460	3.455	3.449	3.445	3.437	3.430	3.427	3.409
CP39	-0.206	-0.387	-0.556	-0.711	-0.751	-0.071	-0.101	-0.162	-0.197	-0.223	-0.283	-0.603	-0.766	-0.923	-0.977
CP40	-0.215	-0.281	-0.473	-0.738	-0.805	-0.099	-0.128	-0.182	-0.218	-0.253	-0.299	-0.412	-0.649	-0.975	-1.117
CP41	-0.227	-0.264	-0.355	-0.722	-0.824	-0.147	-0.168	-0.207	-0.236	-0.278	-0.317	-0.349	-0.447	-0.930	-1.142
CP42	-0.181	-0.207	-0.201	-0.523	-0.687	-0.096	-0.113	-0.166	-0.183	-0.218	-0.269	-0.296	-0.277	-0.569	-0.892
CP43	-0.202	-0.234	-0.229	-0.236	-0.392	-0.113	-0.125	-0.143	-0.157	-0.176	-0.246	-0.321	-0.331	-0.351	-0.604
CP44	-0.464	-0.458	-0.461	-0.461	-0.446	-0.791	-0.783	-0.760	-0.730	-0.713	-0.710	-0.706	-0.709	-0.719	-0.708
CP45	0.219	0.249	0.264	0.300	0.317	0.122	0.128	0.138	0.143	0.151	0.166	0.189	0.204	0.235	0.267
CP46	0.228	0.256	0.270	0.305	0.323	0.133	0.136	0.146	0.151	0.159	0.172	0.195	0.210	0.241	0.271
CP47	0.257	0.281	0.294	0.323	0.337	0.161	0.165	0.174	0.177	0.184	0.197	0.218	0.231	0.255	0.283
CP48	0.227	0.253	0.262	0.286	0.300	0.128	0.131	0.140	0.142	0.150	0.163	0.181	0.193	0.214	0.237
CP49	0.196	0.224	0.233	0.259	0.271	0.086	0.091	0.102	0.106	0.114	0.128	0.147	0.159	0.183	0.204
CP50	0.036	0.097	0.127	0.168	0.183	-0.124	-0.109	-0.080	-0.071	-0.056	-0.033	0.001	0.021	0.059	0.094
CP51	0.038	0.094	0.126	0.167	0.180	-0.104	-0.100	-0.078	-0.068	-0.055	-0.032	0.001	0.020	0.057	0.090
CP52	0.033	0.088	0.119	0.160	0.173	-0.112	-0.104	-0.083	-0.074	-0.061	-0.040	-0.007	0.011	0.047	0.080
CP53	0.040	0.094	0.125	0.165	0.179	-0.101	-0.093	-0.073	-0.065	-0.052	-0.030	0.000	0.018	0.054	0.088
CP54	0.028	0.079	0.112	0.153	0.167	-0.115	-0.107	-0.087	-0.079	-0.067	-0.045	-0.015	0.004	0.039	0.072
CP55	0.025	0.075	0.110	0.150	0.164	-0.118	-0.109	-0.088	-0.081	-0.068	-0.046	-0.016	0.001	0.035	0.067
CP56	0.025	0.067	0.098	0.149	0.165	-0.117	-0.108	-0.088	-0.080	-0.067	-0.047	-0.015	0.004	0.043	0.081
CP57	0.038	0.080	0.111	0.162	0.178	-0.102	-0.092	-0.073	-0.064	-0.052	-0.031	-0.001	0.019	0.058	0.096
CP58	0.014	0.056	0.086	0.137	0.153	-0.129	-0.120	-0.100	-0.092	-0.080	-0.058	-0.027	-0.008	0.032	0.068
CP60	0.053	0.092	0.123	0.176	0.191	-0.083	-0.075	-0.056	-0.048	-0.036	-0.014	0.017	0.036	0.073	0.111
CP61	-0.494	-0.505	-0.511	-0.528	-0.537	-0.103	-0.109	-0.117	-0.119	-0.123	-0.129	-0.145	-0.144	-0.182	-0.272
CP62	-0.162	-0.145	-0.143	-0.128	-0.121	-0.069	-0.069	-0.069	-0.070	-0.071	-0.076	-0.086	-0.101	-0.156	-0.239
CP63	-0.172	-0.164	-0.170	-0.169	-0.174	-0.059	-0.056	-0.054	-0.053	-0.050	-0.048	-0.054	-0.076	-0.091	-0.144
CP64	-0.172	-0.157	-0.169	-0.169	-0.177	-0.058	-0.057	-0.053	-0.053	-0.050	-0.048	-0.063	-0.087	-0.088	-0.136
CP65	-0.096	-0.122	-0.135	-0.163	-0.179	-0.025	-0.025	-0.022	-0.022	-0.020	-0.013	-0.040	-0.169	-0.276	-0.339

Table X. Continued

Orifice Name	Point 42.	Point 43.	Point 44.	Point 45.	Point 46.	Point 47.	Point 48.	Point 49.	Point 50.	Point 51.	Point 52.	Point 53.	Point 54.	Point 55.	Point 56.
CP1	0.007	0.003	-0.005	-0.006	-0.009	-0.017	-0.036	-0.061	-0.098	-0.130	0.008	0.006	-0.002	-0.005	-0.008
CP2	-0.059	-0.066	-0.069	-0.063	-0.064	-0.071	-0.092	-0.114	-0.149	-0.179	-0.042	-0.045	-0.049	-0.052	-0.055
CP3	0.016	0.010	0.002	-0.001	-0.009	-0.018	-0.041	-0.065	-0.110	-0.151	0.017	0.014	0.004	0.001	-0.009
CP4	0.009	0.003	-0.006	-0.012	-0.019	-0.045	-0.102	-0.130	-0.168	-0.222	0.011	0.006	-0.004	-0.011	-0.018
CP5	-0.009	-0.016	-0.024	-0.029	-0.034	-0.051	-0.113	-0.189	-0.369	-0.466	-0.011	-0.014	-0.024	-0.029	-0.034
CP7	0.028	0.015	-0.015	-0.031	-0.054	-0.107	-0.129	-0.248	-0.256	-0.322	0.028	0.019	-0.013	-0.030	-0.052
CP8	-0.004	-0.014	-0.034	-0.041	-0.054	-0.086	-0.094	-0.215	-0.316	-0.408	-0.004	-0.012	-0.033	-0.041	-0.054
CP9	-0.004	-0.010	-0.029	-0.036	-0.036	-0.042	-0.077	-0.095	-0.283	-0.354	-0.003	-0.010	-0.028	-0.035	-0.037
CP10	-0.010	-0.018	-0.028	-0.033	-0.037	-0.051	-0.091	-0.137	-0.304	-0.353	-0.010	-0.014	-0.027	-0.032	-0.037
CP11	0.015	0.010	0.002	0.000	-0.002	-0.009	-0.024	-0.041	-0.064	-0.086	0.017	0.014	0.005	0.002	-0.002
CP12	0.013	0.008	0.000	-0.001	-0.004	-0.011	-0.027	-0.046	-0.073	-0.110	0.015	0.012	0.003	0.000	-0.004
CP13	0.025	0.021	0.014	0.012	0.009	0.002	-0.021	-0.041	-0.066	-0.103	0.028	0.026	0.017	0.013	0.010
CP14	0.006	0.000	-0.008	-0.011	-0.014	-0.019	-0.043	-0.062	-0.085	-0.122	0.007	0.002	-0.008	-0.011	-0.015
CP16	0.007	0.000	-0.010	-0.014	-0.020	-0.046	-0.134	-0.175	-0.206	-0.288	0.008	0.003	-0.009	-0.014	-0.021
CP17	-0.019	-0.025	-0.034	-0.038	-0.044	-0.059	-0.113	-0.166	-0.362	-0.410	-0.020	-0.025	-0.036	-0.040	-0.047
CP18	-0.015	-0.023	-0.038	-0.041	-0.046	-0.057	-0.105	-0.160	-0.225	-0.275	-0.017	-0.022	-0.037	-0.042	-0.049
CP20	-0.003	-0.017	-0.047	-0.060	-0.078	-0.108	-0.121	-0.174	-0.224	-0.274	-0.003	-0.015	-0.046	-0.060	-0.080
CP21	0.013	0.001	-0.032	-0.045	-0.069	-0.113	-0.139	-0.175	-0.234	-0.294	0.014	0.003	-0.031	-0.045	-0.067
CP22	-0.021	-0.029	-0.038	-0.043	-0.048	-0.067	-0.130	-0.201	-0.302	-0.370	-0.022	-0.026	-0.039	-0.044	-0.051
CP23	0.013	0.004	-0.013	-0.017	-0.026	-0.054	-0.136	-0.187	-0.230	-0.297	0.011	0.005	-0.012	-0.019	-0.029
CP24	-0.016	-0.024	-0.043	-0.049	-0.060	-0.082	-0.117	-0.144	-0.172	-0.192	-0.019	-0.027	-0.043	-0.051	-0.060
CP25	0.007	-0.002	-0.020	-0.027	-0.037	-0.058	-0.094	-0.122	-0.163	-0.199	0.008	0.001	-0.016	-0.024	-0.033
CP26	-0.001	-0.011	-0.030	-0.038	-0.048	-0.072	-0.113	-0.137	-0.194	-0.237	-0.002	-0.009	-0.027	-0.034	-0.045
CP27	0.015	0.005	-0.009	-0.015	-0.024	-0.047	-0.084	-0.105	-0.159	-0.185	0.018	0.011	-0.003	-0.010	-0.020
CP28	-0.006	-0.018	-0.037	-0.045	-0.056	-0.080	-0.123	-0.139	-0.199	-0.234	-0.007	-0.017	-0.036	-0.044	-0.055
CP29	0.007	-0.006	-0.028	-0.039	-0.059	-0.098	-0.159	-0.161	-0.222	-0.274	0.007	-0.002	-0.025	-0.037	-0.055
CP30	-0.007	-0.019	-0.042	-0.050	-0.065	-0.106	-0.213	-0.236	-0.285	-0.348	-0.009	-0.019	-0.041	-0.050	-0.064
CP31	-0.004	-0.016	-0.039	-0.048	-0.062	-0.097	-0.190	-0.258	-0.326	-0.386	-0.008	-0.015	-0.038	-0.046	-0.060
CP32	-0.024	-0.037	-0.062	-0.071	-0.085	-0.125	-0.215	-0.305	-0.380	-0.447	-0.029	-0.040	-0.065	-0.074	-0.087

Table X. Continued

Orifice Name	Point 42.	Point 43.	Point 44.	Point 45.	Point 46.	Point 47.	Point 48.	Point 49.	Point 50.	Point 51.	Point 52.	Point 53.	Point 54.	Point 55.	Point 56.
CP33	-0.010	-0.026	-0.054	-0.065	-0.083	-0.123	-0.201	-0.308	-0.355	-0.422	-0.015	-0.027	-0.054	-0.066	-0.082
CP34	-0.007	-0.036	-0.077	-0.093	-0.113	-0.143	-0.195	-0.288	-0.355	-0.400	-0.011	-0.036	-0.077	-0.094	-0.112
CP35	-0.018	-0.044	-0.097	-0.120	-0.138	-0.184	-0.213	-0.292	-0.354	-0.406	-0.023	-0.047	-0.100	-0.124	-0.143
CP36	-0.025	-0.056	-0.121	-0.149	-0.190	-0.260	-0.296	-0.287	-0.349	-0.411	-0.032	-0.061	-0.125	-0.155	-0.194
CP37	3.372	3.376	3.367	3.350	3.344	3.350	3.354	3.328	3.314	3.328	3.251	3.242	3.248	3.234	3.232
CP39	-0.061	-0.088	-0.138	-0.162	-0.196	-0.239	-0.688	-0.841	-1.040	-1.089	-0.054	-0.080	-0.126	-0.150	-0.179
CP40	-0.079	-0.105	-0.153	-0.171	-0.199	-0.238	-0.420	-0.699	-1.104	-1.258	-0.072	-0.093	-0.139	-0.159	-0.182
CP41	-0.113	-0.132	-0.164	-0.178	-0.200	-0.226	-0.201	-0.367	-1.031	-1.280	-0.102	-0.119	-0.150	-0.164	-0.184
CP42	-0.060	-0.073	-0.104	-0.114	-0.124	-0.144	-0.102	-0.052	-0.402	-0.902	-0.049	-0.061	-0.091	-0.100	-0.111
CP43	-0.080	-0.091	-0.107	-0.113	-0.123	-0.131	-0.115	-0.093	-0.072	-0.419	-0.073	-0.081	-0.098	-0.105	-0.117
CP44	-0.191	-0.187	-0.200	-0.167	-0.166	-0.160	-0.188	-0.177	-0.195	-0.189	-0.138	-0.141	-0.134	-0.138	-0.148
CP45	0.093	0.098	0.113	0.119	0.129	0.144	0.170	0.180	0.212	0.247	0.079	0.086	0.100	0.106	0.115
CP46	0.102	0.105	0.118	0.124	0.133	0.149	0.174	0.182	0.214	0.248	0.084	0.091	0.103	0.108	0.115
CP47	0.129	0.133	0.146	0.151	0.161	0.175	0.195	0.203	0.231	0.259	0.114	0.120	0.131	0.136	0.143
CP48	0.094	0.098	0.111	0.116	0.127	0.139	0.157	0.163	0.186	0.211	0.077	0.082	0.094	0.100	0.106
CP49	0.052	0.057	0.072	0.078	0.088	0.103	0.122	0.128	0.154	0.178	0.034	0.040	0.054	0.060	0.067
CP50	-0.132	-0.112	-0.080	-0.068	-0.052	-0.028	0.005	0.016	0.053	0.089	-0.116	-0.095	-0.070	-0.061	-0.049
CP51	-0.109	-0.103	-0.076	-0.065	-0.050	-0.028	0.005	0.015	0.051	0.085	-0.095	-0.088	-0.067	-0.058	-0.048
CP52	-0.117	-0.107	-0.081	-0.071	-0.057	-0.035	-0.003	0.007	0.041	0.075	-0.103	-0.092	-0.073	-0.065	-0.054
CP53	-0.107	-0.097	-0.072	-0.063	-0.047	-0.027	0.004	0.013	0.047	0.081	-0.093	-0.082	-0.063	-0.055	-0.045
CP54	-0.122	-0.111	-0.088	-0.079	-0.063	-0.043	-0.012	-0.005	0.030	0.065	-0.110	-0.098	-0.080	-0.071	-0.061
CP55	-0.126	-0.115	-0.090	-0.080	-0.066	-0.046	-0.016	-0.007	0.027	0.058	-0.113	-0.101	-0.082	-0.074	-0.065
CP56	-0.120	-0.110	-0.089	-0.079	-0.066	-0.048	-0.016	-0.006	0.032	0.070	-0.108	-0.098	-0.081	-0.073	-0.065
CP57	-0.102	-0.093	-0.071	-0.061	-0.048	-0.031	0.001	0.011	0.050	0.087	-0.089	-0.078	-0.062	-0.055	-0.045
CP58	-0.131	-0.122	-0.102	-0.091	-0.079	-0.059	-0.029	-0.018	0.020	0.056	-0.122	-0.112	-0.096	-0.088	-0.080
CP60	-0.084	-0.074	-0.052	-0.044	-0.030	-0.011	0.019	0.028	0.067	0.103	-0.067	-0.058	-0.041	-0.034	-0.025
CP61	-0.128	-0.130	-0.135	-0.134	-0.135	-0.141	-0.151	-0.148	-0.154	-0.165	-0.134	-0.135	-0.140	-0.142	-0.144
CP62	-0.074	-0.075	-0.076	-0.074	-0.072	-0.073	-0.074	-0.079	-0.077	-0.079	-0.072	-0.071	-0.072	-0.071	-0.072
CP63	-0.053	-0.055	-0.054	-0.053	-0.052	-0.053	-0.054	-0.057	-0.054	-0.060	-0.048	-0.047	-0.048	-0.049	-0.050
CP64	-0.051	-0.050	-0.052	-0.051	-0.050	-0.051	-0.050	-0.056	-0.053	-0.059	-0.047	-0.045	-0.045	-0.047	-0.047
CP65	-0.017	-0.020	-0.021	-0.022	-0.021	-0.024	-0.028	-0.036	-0.027	-0.003	-0.012	-0.016	-0.017	-0.020	

Table X. Continued

Orifice Name	Point 57.	Point 58.	Point 59.	Point 60.	Point 61.	Point 62.	Point 63.	Point 64.	Point 65.	Point 66.	Point 67.	Point 68.	Point 69.	Point 70.	Point 71.
CP1	-0.015	-0.033	-0.055	-0.090	-0.130	-0.147	0.016	0.010	0.005	-0.001	-0.003	-0.012	-0.027	-0.045	-0.086
CP2	-0.060	-0.078	-0.100	-0.131	-0.168	-0.184	-0.043	-0.047	-0.050	-0.057	-0.059	-0.065	-0.081	-0.096	-0.134
CP3	-0.018	-0.039	-0.061	-0.101	-0.149	-0.173	0.023	0.018	0.011	0.004	-0.002	-0.013	-0.032	-0.051	-0.097
CP4	-0.043	-0.096	-0.128	-0.156	-0.220	-0.251	0.017	0.012	0.003	-0.006	-0.013	-0.037	-0.088	-0.119	-0.150
CP5	-0.052	-0.105	-0.187	-0.379	-0.470	-0.507	-0.006	-0.011	-0.018	-0.026	-0.030	-0.049	-0.093	-0.168	-0.376
CP7	-0.106	-0.128	-0.254	-0.250	-0.323	-0.358	0.036	0.024	-0.006	-0.025	-0.047	-0.098	-0.123	-0.202	-0.246
CP8	-0.088	-0.095	-0.193	-0.312	-0.415	-0.453	0.004	-0.008	-0.027	-0.038	-0.051	-0.087	-0.091	-0.125	-0.309
CP9	-0.041	-0.077	-0.088	-0.281	-0.354	-0.393	0.003	-0.005	-0.022	-0.030	-0.033	-0.038	-0.070	-0.075	-0.275
CP10	-0.051	-0.088	-0.118	-0.306	-0.362	-0.391	-0.004	-0.011	-0.021	-0.029	-0.033	-0.047	-0.082	-0.099	-0.314
CP11	-0.010	-0.024	-0.038	-0.064	-0.093	-0.106	0.025	0.020	0.013	0.007	0.004	-0.005	-0.020	-0.031	-0.064
CP12	-0.013	-0.029	-0.045	-0.074	-0.118	-0.137	0.021	0.016	0.010	0.004	0.002	-0.008	-0.024	-0.038	-0.074
CP13	0.002	-0.022	-0.042	-0.066	-0.111	-0.132	0.036	0.031	0.023	0.019	0.015	0.006	-0.015	-0.034	-0.066
CP14	-0.022	-0.044	-0.066	-0.089	-0.133	-0.151	0.013	0.006	-0.002	-0.008	-0.011	-0.019	-0.039	-0.060	-0.091
CP16	-0.046	-0.132	-0.161	-0.206	-0.295	-0.337	0.014	0.009	-0.001	-0.009	-0.016	-0.040	-0.123	-0.133	-0.203
CP17	-0.064	-0.115	-0.145	-0.359	-0.431	-0.455	-0.017	-0.023	-0.032	-0.039	-0.045	-0.062	-0.110	-0.113	-0.363
CP18	-0.061	-0.105	-0.136	-0.229	-0.288	-0.311	-0.011	-0.019	-0.031	-0.041	-0.046	-0.058	-0.099	-0.099	-0.233
CP20	-0.111	-0.120	-0.189	-0.225	-0.283	-0.312	0.004	-0.010	-0.040	-0.058	-0.076	-0.108	-0.123	-0.201	-0.226
CP21	-0.114	-0.149	-0.190	-0.234	-0.302	-0.335	0.021	0.007	-0.024	-0.042	-0.065	-0.110	-0.154	-0.207	-0.234
CP22	-0.071	-0.133	-0.174	-0.308	-0.390	-0.429	-0.017	-0.024	-0.035	-0.043	-0.048	-0.068	-0.125	-0.125	-0.311
CP23	-0.057	-0.139	-0.176	-0.241	-0.330	-0.365	0.017	0.010	-0.006	-0.016	-0.023	-0.051	-0.127	-0.118	-0.241
CP24	-0.080	-0.111	-0.135	-0.179	-0.222	-0.237	-0.015	-0.023	-0.037	-0.047	-0.054	-0.071	-0.098	-0.116	-0.162
CP25	-0.054	-0.086	-0.111	-0.167	-0.226	-0.249	0.016	0.007	-0.008	-0.018	-0.025	-0.041	-0.069	-0.091	-0.146
CP26	-0.067	-0.103	-0.131	-0.196	-0.264	-0.290	0.007	-0.004	-0.017	-0.028	-0.036	-0.056	-0.087	-0.117	-0.174
CP27	-0.040	-0.071	-0.096	-0.159	-0.207	-0.226	0.024	0.016	0.005	-0.004	-0.011	-0.028	-0.056	-0.084	-0.140
CP28	-0.076	-0.112	-0.138	-0.205	-0.264	-0.287	-0.001	-0.012	-0.028	-0.038	-0.048	-0.067	-0.100	-0.129	-0.185
CP29	-0.094	-0.150	-0.169	-0.226	-0.304	-0.334	0.013	0.002	-0.016	-0.030	-0.047	-0.083	-0.134	-0.152	-0.205
CP30	-0.103	-0.207	-0.235	-0.296	-0.382	-0.419	-0.006	-0.016	-0.035	-0.046	-0.057	-0.093	-0.190	-0.177	-0.278
CP31	-0.095	-0.181	-0.233	-0.341	-0.424	-0.459	-0.001	-0.012	-0.030	-0.042	-0.053	-0.083	-0.160	-0.163	-0.327
CP32	-0.126	-0.206	-0.276	-0.402	-0.487	-0.524	-0.027	-0.039	-0.060	-0.072	-0.084	-0.118	-0.189	-0.194	-0.398

Table X. Continued

Orifice Name	Point 57.	Point 58.	Point 59.	Point 60.	Point 61.	Point 62.	Point 63.	Point 64.	Point 65.	Point 66.	Point 67.	Point 68.	Point 69.	Point 70.	Point 71.
CP33	-0.122	-0.190	-0.312	-0.377	-0.463	-0.499	-0.010	-0.025	-0.050	-0.063	-0.076	-0.113	-0.177	-0.235	-0.373
CP34	-0.142	-0.190	-0.314	-0.379	-0.447	-0.473	-0.005	-0.032	-0.070	-0.090	-0.103	-0.133	-0.179	-0.376	-0.373
CP35	-0.186	-0.204	-0.312	-0.384	-0.456	-0.483	-0.018	-0.045	-0.095	-0.121	-0.133	-0.176	-0.194	-0.332	-0.384
CP36	-0.265	-0.314	-0.305	-0.383	-0.464	-0.499	-0.028	-0.059	-0.121	-0.156	-0.192	-0.257	-0.308	-0.311	-0.386
CP37	3.227	3.231	3.223	3.230	3.226	3.219	3.120	3.118	3.117	3.111	3.117	3.110	3.112	3.099	3.096
CP39	-0.212	-0.667	-0.837	-1.081	-1.137	-1.169	-0.041	-0.067	-0.111	-0.137	-0.162	-0.189	-0.606	-0.800	-1.130
CP40	-0.213	-0.323	-0.659	-1.167	-1.377	-1.365	-0.057	-0.080	-0.124	-0.146	-0.166	-0.193	-0.222	-0.553	-1.150
CP41	-0.209	-0.159	-0.215	-0.732	-1.158	-1.245	-0.089	-0.106	-0.134	-0.151	-0.169	-0.192	-0.150	-0.177	-0.481
CP42	-0.129	-0.095	-0.040	-0.072	-0.480	-0.673	-0.036	-0.048	-0.075	-0.088	-0.097	-0.113	-0.088	-0.045	-0.026
CP43	-0.129	-0.118	-0.094	-0.071	-0.193	-0.318	-0.062	-0.072	-0.086	-0.096	-0.105	-0.119	-0.111	-0.093	-0.066
CP44	-0.148	-0.152	-0.167	-0.180	-0.151	-0.158	-0.177	-0.180	-0.173	-0.175	-0.189	-0.177	-0.187	-0.181	-0.207
CP45	0.131	0.156	0.170	0.202	0.231	0.246	0.072	0.079	0.094	0.098	0.108	0.123	0.147	0.161	0.192
CP46	0.132	0.155	0.168	0.201	0.228	0.243	0.074	0.080	0.095	0.098	0.107	0.119	0.143	0.155	0.185
CP47	0.157	0.178	0.189	0.216	0.240	0.253	0.103	0.110	0.123	0.125	0.134	0.146	0.166	0.178	0.202
CP48	0.121	0.139	0.149	0.171	0.190	0.201	0.066	0.071	0.084	0.087	0.095	0.107	0.127	0.136	0.156
CP49	0.084	0.105	0.114	0.138	0.156	0.168	0.020	0.027	0.043	0.046	0.056	0.069	0.091	0.102	0.123
CP50	-0.025	0.005	0.020	0.057	0.085	0.099	-0.104	-0.085	-0.057	-0.051	-0.039	-0.020	0.009	0.023	0.055
CP51	-0.025	0.005	0.019	0.054	0.081	0.094	-0.080	-0.076	-0.054	-0.049	-0.037	-0.020	0.009	0.023	0.052
CP52	-0.033	-0.005	0.010	0.044	0.070	0.084	-0.088	-0.081	-0.060	-0.055	-0.043	-0.026	-0.001	0.013	0.042
CP53	-0.024	0.004	0.017	0.050	0.077	0.091	-0.076	-0.070	-0.049	-0.045	-0.035	-0.018	0.008	0.020	0.049
CP54	-0.042	-0.016	-0.002	0.031	0.057	0.070	-0.097	-0.088	-0.069	-0.064	-0.053	-0.039	-0.012	0.002	0.027
CP55	-0.044	-0.019	-0.005	0.027	0.051	0.065	-0.099	-0.091	-0.070	-0.067	-0.056	-0.041	-0.017	-0.003	0.023
CP56	-0.046	-0.020	-0.005	0.032	0.061	0.078	-0.095	-0.089	-0.071	-0.066	-0.059	-0.043	-0.017	-0.002	0.028
CP57	-0.029	-0.001	0.014	0.051	0.081	0.096	-0.074	-0.067	-0.049	-0.047	-0.035	-0.023	0.004	0.017	0.048
CP58	-0.060	-0.032	-0.019	0.016	0.045	0.061	-0.111	-0.103	-0.087	-0.082	-0.073	-0.058	-0.034	-0.020	0.010
CP60	-0.006	0.020	0.035	0.070	0.098	0.113	-0.051	-0.043	-0.026	-0.022	-0.012	0.001	0.027	0.040	0.069
CP61	-0.152	-0.158	-0.154	-0.159	-0.171	-0.178	-0.133	-0.136	-0.139	-0.145	-0.146	-0.158	-0.162	-0.162	-0.169
CP62	-0.072	-0.071	-0.071	-0.068	-0.073	-0.073	-0.065	-0.066	-0.064	-0.066	-0.064	-0.065	-0.063	-0.064	-0.062
CP63	-0.050	-0.050	-0.051	-0.049	-0.058	-0.061	-0.039	-0.039	-0.039	-0.041	-0.040	-0.041	-0.042	-0.041	-0.043
CP64	-0.047	-0.047	-0.048	-0.047	-0.056	-0.060	-0.036	-0.036	-0.035	-0.038	-0.038	-0.038	-0.038	-0.038	-0.041
CP65	-0.021	-0.024	-0.030	-0.025	-0.026	-0.024	-0.002	-0.006	-0.007	-0.011	-0.011	-0.014	-0.017	-0.017	-0.021

Table X. Continued

Orifice Name	Point 72.	Point 73.	Point 74.	Point 75.	Point 76.	Point 77.	Point 78.	Point 79.	Point 80.	Point 81.	Point 82.	Point 83.	Point 84.	Point 85.	Point 86.
CP1	-0.121	-0.131	0.016	0.013	0.005	0.002	-0.001	-0.010	-0.021	-0.038	-0.081	-0.116	-0.124	0.016	0.013
CP2	-0.170	-0.178	-0.046	-0.046	-0.054	-0.055	-0.058	-0.065	-0.076	-0.089	-0.129	-0.163	-0.172	-0.047	-0.048
CP3	-0.140	-0.152	0.025	0.022	0.011	0.008	0.000	-0.011	-0.029	-0.046	-0.090	-0.132	-0.142	0.024	0.022
CP4	-0.209	-0.224	0.019	0.016	0.004	-0.002	-0.011	-0.033	-0.081	-0.114	-0.143	-0.197	-0.212	0.017	0.014
CP5	-0.465	-0.487	-0.005	-0.008	-0.019	-0.024	-0.031	-0.047	-0.088	-0.155	-0.371	-0.469	-0.488	-0.008	-0.011
CP7	-0.319	-0.335	0.037	0.027	-0.004	-0.020	-0.045	-0.092	-0.119	-0.155	-0.240	-0.313	-0.329	0.037	0.025
CP8	-0.413	-0.431	0.003	-0.006	-0.026	-0.035	-0.049	-0.085	-0.089	-0.106	-0.301	-0.412	-0.431	0.002	-0.007
CP9	-0.349	-0.367	0.003	-0.005	-0.022	-0.027	-0.032	-0.037	-0.067	-0.079	-0.270	-0.342	-0.362	0.003	-0.006
CP10	-0.370	-0.385	-0.004	-0.009	-0.022	-0.026	-0.033	-0.047	-0.079	-0.096	-0.318	-0.375	-0.392	-0.007	-0.010
CP11	-0.092	-0.098	0.028	0.024	0.015	0.010	0.007	-0.002	-0.015	-0.026	-0.061	-0.090	-0.096	0.027	0.024
CP12	-0.115	-0.126	0.023	0.020	0.010	0.007	0.002	-0.006	-0.020	-0.035	-0.071	-0.112	-0.122	0.021	0.021
CP13	-0.109	-0.119	0.039	0.035	0.026	0.023	0.018	0.010	-0.010	-0.029	-0.063	-0.107	-0.116	0.039	0.036
CP14	-0.134	-0.143	0.013	0.009	-0.003	-0.005	-0.012	-0.018	-0.037	-0.057	-0.089	-0.134	-0.143	0.011	0.008
CP16	-0.293	-0.313	0.016	0.012	-0.001	-0.006	-0.013	-0.038	-0.114	-0.130	-0.194	-0.285	-0.306	0.015	0.011
CP17	-0.434	-0.449	-0.019	-0.022	-0.035	-0.040	-0.046	-0.062	-0.106	-0.110	-0.364	-0.435	-0.452	-0.021	-0.026
CP18	-0.291	-0.303	-0.014	-0.018	-0.032	-0.038	-0.047	-0.059	-0.094	-0.092	-0.233	-0.293	-0.306	-0.017	-0.021
CP20	-0.283	-0.297	0.004	-0.019	-0.039	-0.054	-0.074	-0.106	-0.125	-0.209	-0.224	-0.282	-0.296	0.002	-0.010
CP21	-0.302	-0.318	0.021	0.011	-0.022	-0.038	-0.063	-0.106	-0.156	-0.215	-0.231	-0.298	-0.315	0.022	0.009
CP22	-0.397	-0.415	-0.017	-0.021	-0.036	-0.041	-0.048	-0.067	-0.120	-0.116	-0.308	-0.397	-0.416	-0.020	-0.026
CP23	-0.331	-0.348	0.018	0.012	-0.005	-0.012	-0.021	-0.047	-0.117	-0.099	-0.231	-0.324	-0.342	0.018	0.012
CP24	-0.204	-0.214	-0.017	-0.022	-0.038	-0.043	-0.052	-0.068	-0.089	-0.103	-0.147	-0.184	-0.191	-0.020	-0.025
CP25	-0.202	-0.216	0.017	0.012	-0.004	-0.010	-0.018	-0.035	-0.057	-0.076	-0.125	-0.176	-0.188	0.016	0.011
CP26	-0.238	-0.253	0.006	0.001	-0.015	-0.022	-0.031	-0.049	-0.076	-0.101	-0.153	-0.211	-0.224	0.006	0.001
CP27	-0.186	-0.198	0.026	0.021	0.007	0.003	-0.005	-0.022	-0.044	-0.068	-0.119	-0.161	-0.171	0.026	0.022
CP28	-0.242	-0.256	-0.004	-0.010	-0.028	-0.036	-0.043	-0.062	-0.089	-0.116	-0.164	-0.218	-0.231	-0.005	-0.014
CP29	-0.280	-0.299	0.014	0.007	-0.014	-0.023	-0.042	-0.076	-0.122	-0.131	-0.182	-0.253	-0.270	0.013	0.007
CP30	-0.367	-0.387	-0.006	-0.014	-0.034	-0.043	-0.054	-0.087	-0.175	-0.149	-0.256	-0.346	-0.363	-0.008	-0.016
CP31	-0.414	-0.433	-0.002	-0.009	-0.030	-0.038	-0.048	-0.077	-0.146	-0.131	-0.307	-0.396	-0.414	-0.004	-0.011
CP32	-0.490	-0.509	-0.031	-0.040	-0.061	-0.070	-0.083	-0.114	-0.178	-0.163	-0.389	-0.481	-0.501	-0.036	-0.045

Table X. Continued

Name	Point	Point																
CP33	-0.467	-0.487	-0.014	-0.025	-0.049	-0.060	-0.074	-0.108	-0.167	-0.362	-0.461	-0.482	-0.017	-0.028	-0.047	-0.067	-0.086	
CP34	-0.450	-0.466	-0.006	-0.028	-0.082	-0.093	-0.117	-0.130	-0.170	-0.184	-0.349	-0.372	-0.449	-0.468	-0.490	-0.038	-0.067	
CP35	-0.461	-0.478	-0.022	-0.046	-0.093	-0.117	-0.122	-0.151	-0.192	-0.250	-0.300	-0.313	-0.375	-0.468	-0.468	-0.025	-0.047	
CP36	-0.476	-0.496	-0.034	-0.062	-0.122	-0.151	-0.170	-0.184	-0.407	-0.437	-0.459	-0.461	-0.490	-0.038	-0.067	-0.028	-0.047	
CP37	3.089	3.070	3.001	2.999	2.991	2.985	2.982	2.975	2.977	2.968	2.956	2.952	2.949	2.830	2.830	-1.134	-1.134	
CP38	-1.134	-1.134	-0.038	-0.063	-0.100	-0.118	-0.122	-0.148	-0.144	-0.161	-0.177	-0.183	-0.194	-1.181	-1.181	-0.062	-0.062	
CP39	-1.140	-1.140	-0.054	-0.074	-0.118	-0.134	-0.126	-0.151	-0.177	-0.166	-0.183	-0.175	-1.146	-1.146	-0.053	-0.072	-0.072	
CP40	-0.954	-1.028	-0.086	-0.100	-0.142	-0.129	-0.148	-0.161	-0.171	-0.180	-0.188	-0.194	-0.194	-0.196	-0.196	-0.067	-0.067	
CP41	-0.321	-0.394	-0.031	-0.042	-0.068	-0.079	-0.089	-0.106	-0.115	-0.100	-0.108	-0.115	-0.128	-0.217	-0.282	-0.031	-0.100	
CP42	-0.157	-0.220	-0.063	-0.071	-0.086	-0.095	-0.108	-0.100	-0.128	-0.115	-0.115	-0.115	-0.128	-0.162	-0.162	-0.059	-0.039	
CP43	-0.200	-0.196	-0.060	-0.066	-0.082	-0.090	-0.100	-0.108	-0.128	-0.132	-0.144	-0.169	-0.198	-0.208	-0.208	-0.052	-0.061	
CP44	-0.221	-0.227	-0.067	-0.075	-0.085	-0.093	-0.101	-0.114	-0.141	-0.153	-0.180	-0.211	-0.218	-0.218	-0.068	-0.068	-0.051	
CP45	0.175	0.180	0.055	0.063	0.070	0.077	0.085	0.095	0.117	0.124	0.141	0.163	0.169	0.169	0.169	0.169	0.175	
CP46	0.213	0.226	0.053	0.095	0.080	0.096	0.095	0.108	0.118	0.132	0.144	0.169	0.198	0.208	0.208	0.052	0.061	
CP47	0.247	0.233	0.055	0.095	0.071	0.110	0.110	0.116	0.134	0.157	0.166	0.188	0.214	0.219	0.219	0.093	0.093	
CP48	0.175	0.180	0.055	0.063	0.070	0.077	0.085	0.095	0.117	0.124	0.141	0.163	0.169	0.169	0.169	0.169	0.175	
CP49	0.142	0.147	0.099	0.018	0.028	0.035	0.043	0.043	0.055	0.079	0.088	0.107	0.129	0.135	0.135	0.004	0.005	
CP50	0.084	0.090	0.092	0.067	0.075	0.046	0.046	0.046	0.049	0.051	0.051	0.081	0.090	0.091	0.091	0.072	0.072	
CP51	0.080	0.086	0.072	0.066	0.053	0.046	0.046	0.046	0.049	0.051	0.051	0.077	0.084	0.084	0.084	0.063	0.063	
CP52	0.069	0.075	0.081	0.071	0.051	0.058	0.051	0.040	0.026	0.026	0.014	0.038	0.066	0.073	0.078	0.069	0.069	
CP53	0.076	0.083	0.067	0.058	0.046	0.030	0.039	0.030	0.016	0.010	0.022	0.048	0.073	0.080	0.064	0.054	0.054	
CP54	0.054	0.060	0.089	0.078	0.067	0.059	0.049	0.049	0.011	0.011	0.023	0.046	0.051	0.057	0.077	0.091	0.077	
CP55	0.048	0.054	0.092	0.081	0.070	0.063	0.053	0.040	0.015	0.016	0.042	0.042	0.044	0.044	0.055	0.055	0.080	
CP56	0.058	0.065	0.089	0.080	0.070	0.057	0.048	0.041	0.018	0.005	0.020	0.020	0.025	0.053	0.053	0.064	0.064	
CP57	0.077	0.085	0.066	0.057	0.048	0.041	0.041	0.041	0.016	0.016	0.042	0.042	0.075	0.075	0.088	0.079	0.079	
CP58	0.040	0.046	0.098	0.106	0.031	0.031	0.022	0.014	0.070	0.061	0.058	0.058	0.058	0.058	0.041	0.041	0.099	
CP59	0.099	0.105	0.040	0.031	0.022	0.014	0.014	0.005	0.031	0.005	0.022	0.003	0.033	0.033	0.033	0.033	0.026	
CP60	0.099	0.118	0.040	0.038	0.031	0.022	0.014	0.005	0.031	0.005	0.022	0.003	0.027	0.027	0.026	0.026	0.026	
CP61	0.178	0.180	0.040	0.038	0.037	0.037	0.037	0.037	0.147	0.146	0.147	0.162	0.173	0.176	0.144	0.145	0.145	
CP62	0.063	0.063	0.061	0.061	0.063	0.063	0.062	0.063	0.151	0.151	0.147	0.160	0.167	0.170	0.176	0.176	0.145	
CP63	0.048	0.049	0.034	0.031	0.034	0.036	0.036	0.034	0.038	0.038	0.038	0.058	0.059	0.057	0.057	0.040	0.029	
CP64	0.045	0.046	0.034	0.031	0.031	0.031	0.032	0.033	0.033	0.035	0.035	0.035	0.037	0.036	0.036	0.030	0.029	
CP65	0.019	0.017	0.001	0.001	0.001	0.001	0.001	0.001	0.005	0.005	0.005	0.011	0.011	0.011	0.011	0.000	0.001	

Table X. Continued

Orifice Name	Point 87.	Point 88.	Point 89.	Point 90.	Point 91.	Point 92.	Point 93.	Point 94.	Point 95.	Point 96.	Point 97.	Point 98.	Point 99.	Point 100.	Point 101.
CP1	0.007	0.005	0.000	-0.005	-0.023	-0.039	-0.075	-0.113	-0.122	0.018	0.012	0.006	0.004	-0.003	-0.007
CP2	-0.052	-0.051	-0.056	-0.060	-0.074	-0.089	-0.120	-0.159	-0.167	-0.046	-0.052	-0.056	-0.055	-0.060	-0.064
CP3	0.014	0.010	0.001	-0.008	-0.029	-0.048	-0.084	-0.127	-0.137	0.027	0.020	0.013	0.009	0.000	-0.009
CP4	0.003	0.000	-0.009	-0.030	-0.081	-0.116	-0.137	-0.195	-0.206	0.021	0.013	0.004	-0.001	-0.010	-0.031
CP5	-0.019	-0.024	-0.032	-0.045	-0.089	-0.155	-0.366	-0.471	-0.489	-0.009	-0.014	-0.022	-0.028	-0.036	-0.049
CP7	-0.002	-0.019	-0.042	-0.086	-0.119	-0.147	-0.237	-0.311	-0.325	0.041	0.026	-0.003	-0.018	-0.042	-0.087
CP8	-0.025	-0.033	-0.048	-0.082	-0.090	-0.109	-0.293	-0.415	-0.431	0.003	-0.008	-0.028	-0.035	-0.050	-0.086
CP9	-0.020	-0.027	-0.032	-0.035	-0.066	-0.085	-0.267	-0.341	-0.357	0.002	-0.007	-0.022	-0.029	-0.036	-0.038
CP10	-0.022	-0.026	-0.033	-0.044	-0.081	-0.106	-0.322	-0.382	-0.398	-0.007	-0.016	-0.025	-0.029	-0.037	-0.047
CP11	0.018	0.015	0.010	0.002	-0.014	-0.027	-0.055	-0.087	-0.093	0.032	0.026	0.019	0.016	0.009	0.003
CP12	0.012	0.009	0.005	-0.002	-0.020	-0.036	-0.065	-0.109	-0.119	0.027	0.019	0.012	0.009	0.004	-0.003
CP13	0.029	0.026	0.020	0.013	-0.010	-0.030	-0.059	-0.105	-0.112	0.044	0.037	0.031	0.028	0.021	0.014
CP14	-0.002	-0.004	-0.011	-0.015	-0.040	-0.059	-0.087	-0.134	-0.143	0.013	0.005	-0.005	-0.007	-0.014	-0.019
CP16	0.002	-0.004	-0.012	-0.033	-0.112	-0.142	-0.185	-0.282	-0.299	0.019	0.009	-0.001	-0.004	-0.013	-0.033
CP17	-0.035	-0.040	-0.048	-0.063	-0.108	-0.121	-0.362	-0.439	-0.454	-0.027	-0.033	-0.042	-0.046	-0.055	-0.070
CP18	-0.032	-0.039	-0.047	-0.055	-0.096	-0.096	-0.231	-0.294	-0.306	-0.016	-0.026	-0.038	-0.042	-0.051	-0.062
CP20	-0.039	-0.055	-0.076	-0.102	-0.131	-0.217	-0.220	-0.283	-0.295	0.005	-0.013	-0.042	-0.056	-0.077	-0.106
CP21	-0.020	-0.037	-0.061	-0.103	-0.160	-0.219	-0.227	-0.299	-0.312	0.023	0.008	-0.023	-0.039	-0.062	-0.105
CP22	-0.036	-0.042	-0.050	-0.065	-0.122	-0.125	-0.303	-0.398	-0.415	-0.023	-0.030	-0.042	-0.046	-0.054	-0.071
CP23	-0.002	-0.008	-0.019	-0.042	-0.113	-0.105	-0.220	-0.319	-0.334	0.021	0.011	-0.003	-0.008	-0.019	-0.041
CP24	-0.038	-0.043	-0.052	-0.064	-0.089	-0.101	-0.136	-0.171	-0.178	-0.023	-0.030	-0.042	-0.046	-0.054	-0.066
CP25	0.000	-0.006	-0.014	-0.028	-0.052	-0.070	-0.110	-0.160	-0.170	0.021	0.012	0.000	-0.004	-0.012	-0.023
CP26	-0.013	-0.018	-0.028	-0.041	-0.071	-0.096	-0.136	-0.193	-0.204	0.010	0.001	-0.011	-0.016	-0.025	-0.038
CP27	0.012	0.008	0.000	-0.013	-0.038	-0.061	-0.103	-0.144	-0.152	0.030	0.023	0.014	0.011	0.002	-0.008
CP28	-0.027	-0.033	-0.044	-0.056	-0.086	-0.112	-0.151	-0.203	-0.213	-0.007	-0.016	-0.029	-0.034	-0.043	-0.057
CP29	-0.010	-0.021	-0.037	-0.069	-0.118	-0.127	-0.164	-0.236	-0.250	0.016	0.007	-0.010	-0.018	-0.035	-0.065
CP30	-0.032	-0.041	-0.054	-0.081	-0.171	-0.153	-0.239	-0.331	-0.346	-0.009	-0.019	-0.036	-0.041	-0.053	-0.081
CP31	-0.027	-0.036	-0.048	-0.070	-0.140	-0.128	-0.292	-0.384	-0.401	-0.005	-0.015	-0.029	-0.036	-0.047	-0.068
CP32	-0.063	-0.071	-0.084	-0.111	-0.175	-0.163	-0.381	-0.479	-0.495	-0.040	-0.053	-0.070	-0.078	-0.089	-0.117

Table X. Continued

Orifice Name	Point 87.	Point 88.	Point 89.	Point 90.	Point 91.	Point 92.	Point 93.	Point 94.	Point 95.	Point 96.	Point 97.	Point 98.	Point 99.	Point 100.	Point 101.
CP33	-0.050	-0.059	-0.072	-0.104	-0.167	-0.172	-0.354	-0.457	-0.477	-0.020	-0.032	-0.054	-0.062	-0.075	-0.105
CP34	-0.066	-0.079	-0.096	-0.121	-0.167	-0.405	-0.348	-0.429	-0.445	-0.009	-0.027	-0.062	-0.077	-0.093	-0.121
CP35	-0.093	-0.116	-0.129	-0.165	-0.184	-0.354	-0.361	-0.440	-0.457	-0.027	-0.051	-0.097	-0.118	-0.131	-0.164
CP36	-0.124	-0.153	-0.191	-0.245	-0.299	-0.316	-0.365	-0.461	-0.479	-0.043	-0.072	-0.130	-0.157	-0.193	-0.247
CP37	2.827	2.816	2.810	2.811	2.799	2.792	2.785	2.785	2.773	2.478	2.466	2.462	2.464	2.448	2.458
CP39	-0.098	-0.120	-0.146	-0.167	-0.475	-0.740	-1.239	-1.274	-1.256	-0.035	-0.059	-0.095	-0.115	-0.139	-0.164
CP40	-0.112	-0.130	-0.152	-0.174	-0.146	-0.375	-0.854	-1.358	-1.395	-0.050	-0.070	-0.112	-0.127	-0.147	-0.173
CP41	-0.124	-0.139	-0.157	-0.177	-0.156	-0.158	-0.156	-0.612	-0.688	-0.086	-0.100	-0.127	-0.137	-0.156	-0.177
CP42	-0.064	-0.072	-0.084	-0.098	-0.090	-0.061	-0.010	-0.162	-0.209	-0.025	-0.038	-0.060	-0.068	-0.081	-0.095
CP43	-0.079	-0.086	-0.097	-0.110	-0.110	-0.100	-0.068	-0.116	-0.139	-0.058	-0.068	-0.080	-0.086	-0.098	-0.111
CP44	-0.164	-0.187	-0.162	-0.169	-0.197	-0.172	-0.194	-0.192	-0.191	-0.191	-0.198	-0.176	-0.199	-0.178	-0.179
CP45	0.081	0.088	0.094	0.109	0.131	0.144	0.173	0.203	0.209	0.054	0.057	0.071	0.074	0.082	0.098
CP46	0.072	0.078	0.085	0.098	0.120	0.131	0.159	0.189	0.192	0.037	0.040	0.054	0.059	0.063	0.079
CP47	0.104	0.110	0.115	0.127	0.145	0.156	0.179	0.201	0.206	0.075	0.077	0.086	0.092	0.096	0.109
CP48	0.062	0.068	0.073	0.085	0.103	0.112	0.131	0.150	0.153	0.027	0.032	0.043	0.048	0.052	0.064
CP49	0.019	0.026	0.031	0.045	0.066	0.075	0.095	0.115	0.119	-0.021	-0.017	-0.003	0.003	0.009	0.022
CP50	-0.051	-0.040	-0.033	-0.015	0.010	0.024	0.053	0.079	0.084	-0.081	-0.070	-0.046	-0.039	-0.034	-0.016
CP51	-0.047	-0.038	-0.031	-0.014	0.010	0.023	0.049	0.075	0.079	-0.060	-0.061	-0.045	-0.038	-0.031	-0.015
CP52	-0.053	-0.044	-0.037	-0.021	0.000	0.013	0.038	0.063	0.068	-0.070	-0.067	-0.050	-0.044	-0.038	-0.023
CP53	-0.041	-0.033	-0.026	-0.011	0.010	0.022	0.047	0.072	0.076	-0.055	-0.052	-0.037	-0.031	-0.028	-0.011
CP54	-0.063	-0.054	-0.049	-0.033	-0.014	-0.001	0.022	0.046	0.050	-0.082	-0.077	-0.062	-0.056	-0.052	-0.037
CP55	-0.065	-0.058	-0.052	-0.037	-0.017	-0.005	0.017	0.042	0.045	-0.083	-0.081	-0.065	-0.059	-0.054	-0.042
CP56	-0.068	-0.059	-0.053	-0.040	-0.019	-0.005	0.021	0.050	0.055	-0.084	-0.081	-0.068	-0.063	-0.057	-0.044
CP57	-0.042	-0.038	-0.031	-0.017	0.003	0.018	0.045	0.072	0.077	-0.056	-0.053	-0.042	-0.036	-0.031	-0.018
CP58	-0.086	-0.079	-0.073	-0.059	-0.039	-0.027	0.000	0.029	0.033	-0.106	-0.104	-0.090	-0.086	-0.081	-0.067
CP60	-0.014	-0.006	-0.002	0.013	0.032	0.045	0.072	0.097	0.102	-0.023	-0.019	-0.008	-0.003	0.002	0.016
CP61	-0.149	-0.150	-0.159	-0.163	-0.168	-0.166	-0.167	-0.178	-0.180	-0.162	-0.168	-0.172	-0.173	-0.177	-0.183
CP62	-0.062	-0.060	-0.061	-0.060	-0.059	-0.057	-0.055	-0.054	-0.053	-0.063	-0.066	-0.064	-0.062	-0.064	-0.063
CP63	-0.032	-0.030	-0.033	-0.032	-0.034	-0.033	-0.033	-0.036	-0.031	-0.032	-0.025	-0.027	-0.026	-0.026	-0.028
CP64	-0.029	-0.027	-0.030	-0.028	-0.030	-0.032	-0.030	-0.031	-0.011	-0.013	-0.011	-0.010	0.005	0.001	-0.002
CP65	-0.001	-0.003	-0.005	-0.006	-0.011	-0.011	-0.013	-0.011	-0.011	-0.005	0.001	-0.002	-0.002	-0.006	-0.007

Table X. Continued

Orifice Name	Point 102.	Point 103.	Point 104.	Point 105.	Point 106.	Point 107.	Point 108.	Point 109.	Point 110.	Point 111.	Point 112.	Point 113.	Point 114.	Point 115.	Point 116.
CP1	-0.019	-0.037	-0.075	-0.100	-0.140	0.058	0.045	0.042	0.029	0.003	-0.019	-0.059	-0.093	-0.142	-0.177
CP2	-0.072	-0.087	-0.121	-0.143	-0.192	-0.018	-0.028	-0.032	-0.042	-0.063	-0.081	-0.120	-0.154	-0.210	-0.261
CP3	-0.028	-0.044	-0.081	-0.112	-0.163	0.069	0.054	0.045	0.020	-0.007	-0.028	-0.066	-0.113	-0.174	-0.229
CP4	-0.077	-0.111	-0.133	-0.173	-0.237	0.060	0.047	0.036	-0.010	-0.078	-0.079	-0.120	-0.183	-0.266	-0.337
CP5	-0.084	-0.141	-0.362	-0.460	-0.560	0.009	-0.005	-0.015	-0.048	-0.143	-0.278	-0.459	-0.564	-0.678	-0.792
CP7	-0.114	-0.143	-0.236	-0.295	-0.372	0.082	0.050	0.015	-0.048	-0.110	-0.223	-0.257	-0.335	-0.429	-0.519
CP8	-0.090	-0.108	-0.284	-0.405	-0.493	0.040	0.017	-0.004	-0.048	-0.088	-0.283	-0.385	-0.470	-0.569	-0.662
CP9	-0.067	-0.098	-0.270	-0.331	-0.407	0.030	0.013	-0.002	-0.016	-0.085	-0.265	-0.301	-0.384	-0.467	-0.549
CP10	-0.078	-0.121	-0.347	-0.383	-0.463	0.018	0.003	-0.008	-0.035	-0.120	-0.374	-0.394	-0.485	-0.558	-0.656
CP11	-0.011	-0.023	-0.054	-0.074	-0.108	0.089	0.075	0.070	0.057	0.034	0.020	-0.020	-0.043	-0.083	-0.113
CP12	-0.017	-0.032	-0.065	-0.096	-0.144	0.068	0.057	0.050	0.038	0.012	-0.001	-0.054	-0.087	-0.151	-0.204
CP13	-0.004	-0.024	-0.058	-0.089	-0.136	0.105	0.094	0.087	0.069	0.036	0.037	-0.030	-0.066	-0.125	-0.169
CP14	-0.039	-0.056	-0.089	-0.123	-0.169	0.036	0.025	0.016	0.002	-0.031	-0.028	-0.099	-0.136	-0.190	-0.232
CP16	-0.102	-0.168	-0.176	-0.256	-0.350	0.059	0.042	0.034	-0.016	-0.150	-0.098	-0.207	-0.297	-0.400	-0.492
CP17	-0.107	-0.154	-0.368	-0.429	-0.512	-0.029	-0.046	-0.055	-0.088	-0.183	-0.400	-0.442	-0.529	-0.637	-0.740
CP18	-0.094	-0.127	-0.240	-0.286	-0.350	-0.005	-0.024	-0.035	-0.062	-0.133	-0.283	-0.289	-0.350	-0.451	-0.535
CP20	-0.135	-0.210	-0.222	-0.273	-0.344	0.022	-0.010	-0.042	-0.101	-0.269	-0.174	-0.260	-0.334	-0.433	-0.519
CP21	-0.161	-0.227	-0.227	-0.286	-0.368	0.052	0.017	-0.019	-0.104	-0.206	-0.165	-0.263	-0.348	-0.414	-0.493
CP22	-0.116	-0.176	-0.302	-0.382	-0.471	-0.020	-0.038	-0.046	-0.085	-0.210	-0.257	-0.381	-0.469	-0.579	-0.677
CP23	-0.099	-0.159	-0.207	-0.291	-0.377	0.061	0.043	0.032	-0.014	-0.137	-0.114	-0.239	-0.317	-0.413	-0.495
CP24	-0.083	-0.094	-0.129	-0.144	-0.178	-0.021	-0.040	-0.046	-0.067	-0.086	-0.099	-0.127	-0.145	-0.174	-0.193
CP25	-0.042	-0.054	-0.096	-0.124	-0.173	0.065	0.052	0.043	0.026	0.006	-0.012	-0.051	-0.083	-0.135	-0.175
CP26	-0.060	-0.073	-0.120	-0.154	-0.210	0.052	0.037	0.027	0.004	-0.017	-0.036	-0.085	-0.123	-0.173	-0.210
CP27	-0.026	-0.036	-0.087	-0.108	-0.149	0.075	0.063	0.054	0.035	0.021	-0.001	-0.040	-0.064	-0.101	-0.130
CP28	-0.080	-0.089	-0.137	-0.168	-0.218	0.004	-0.013	-0.022	-0.047	-0.061	-0.083	-0.129	-0.166	-0.203	-0.237
CP29	-0.109	-0.115	-0.142	-0.194	-0.265	0.055	0.039	0.019	-0.034	-0.053	-0.047	-0.121	-0.178	-0.231	-0.285
CP30	-0.157	-0.195	-0.218	-0.291	-0.374	0.000	-0.019	-0.032	-0.092	-0.183	-0.143	-0.248	-0.322	-0.395	-0.461
CP31	-0.127	-0.161	-0.274	-0.351	-0.433	0.015	-0.002	-0.016	-0.064	-0.153	-0.186	-0.303	-0.379	-0.458	-0.527
CP32	-0.166	-0.190	-0.381	-0.461	-0.550	-0.064	-0.088	-0.101	-0.153	-0.216	-0.389	-0.485	-0.566	-0.657	-0.742

Table X. Continued

Orifice Name	Point 102.	Point 103.	Point 104.	Point 105.	Point 106.	Point 107.	Point 108.	Point 109.	Point 110.	Point 111.	Point 112.	Point 113.	Point 114.	Point 115.	Point 116.
CP33	-0.158	-0.178	-0.351	-0.439	-0.539	-0.023	-0.047	-0.067	-0.122	-0.179	-0.389	-0.447	-0.547	-0.650	-0.757
CP34	-0.158	-0.298	-0.337	-0.397	-0.485	0.004	-0.029	-0.056	-0.105	-0.312	-0.282	-0.357	-0.453	-0.555	-0.659
CP35	-0.177	-0.352	-0.353	-0.410	-0.494	-0.030	-0.077	-0.120	-0.165	-0.326	-0.304	-0.384	-0.471	-0.575	-0.661
CP36	-0.291	-0.297	-0.355	-0.429	-0.532	-0.070	-0.130	-0.188	-0.271	-0.307	-0.322	-0.425	-0.529	-0.645	-0.750
CP37	2.445	2.442	2.441	2.432	2.434	-3.278	-3.268	-3.266	-3.245	-3.219	-3.216	-3.217	-3.190	-3.177	-3.178
CP39	-0.294	-0.636	-1.268	-1.510	-1.361	-0.024	-0.065	-0.104	-0.111	-0.578	-0.965	-1.704	-1.721	-1.616	-1.482
CP40	-0.144	-0.228	-0.541	-1.113	-1.438	-0.048	-0.094	-0.123	-0.157	-0.165	-0.255	-0.575	-1.078	-1.241	-1.290
CP41	-0.169	-0.144	-0.100	-0.373	-0.737	-0.090	-0.121	-0.146	-0.178	-0.130	-0.100	-0.187	-0.468	-0.728	-0.924
CP42	-0.095	-0.061	-0.023	-0.071	-0.284	0.002	-0.024	-0.039	-0.065	-0.018	0.011	-0.023	-0.152	-0.354	-0.565
CP43	-0.111	-0.098	-0.079	-0.096	-0.195	-0.046	-0.065	-0.079	-0.100	-0.077	-0.061	-0.086	-0.140	-0.295	-0.473
CP44	-0.170	-0.171	-0.185	-0.180	-0.185	-0.176	-0.168	-0.165	-0.165	-0.160	-0.162	-0.180	-0.156	-0.156	-0.144
CP45	0.119	0.130	0.157	0.189	0.210	0.070	0.080	0.090	0.123	0.150	0.171	0.191	0.224	0.242	0.274
CP46	0.100	0.111	0.136	0.165	0.189	-0.003	0.000	0.011	0.038	0.066	0.083	0.102	0.136	0.152	0.182
CP47	0.127	0.137	0.156	0.184	0.201	0.058	0.062	0.072	0.094	0.118	0.134	0.149	0.170	0.185	0.211
CP48	0.082	0.089	0.106	0.130	0.145	-0.015	-0.011	0.001	0.022	0.040	0.056	0.065	0.089	0.099	0.124
CP49	0.042	0.051	0.069	0.095	0.110	-0.079	-0.074	-0.062	-0.036	-0.015	-0.001	0.012	0.037	0.051	0.074
CP50	0.009	0.022	0.044	0.075	0.095	-0.035	-0.022	-0.004	0.025	0.052	0.074	0.090	0.118	0.132	0.157
CP51	0.007	0.021	0.042	0.071	0.091	-0.026	-0.019	-0.004	0.024	0.052	0.071	0.086	0.112	0.123	0.150
CP52	-0.001	0.012	0.031	0.061	0.078	-0.030	-0.025	-0.008	0.017	0.044	0.059	0.074	0.103	0.113	0.138
CP53	0.010	0.021	0.040	0.069	0.086	-0.012	-0.005	0.008	0.033	0.058	0.075	0.091	0.114	0.128	0.152
CP54	-0.017	-0.006	0.011	0.041	0.058	-0.061	-0.055	-0.041	-0.017	0.008	0.022	0.035	0.060	0.071	0.098
CP55	-0.020	-0.009	0.007	0.035	0.050	-0.062	-0.053	-0.043	-0.020	0.004	0.020	0.028	0.056	0.067	0.092
CP56	-0.022	-0.010	0.012	0.043	0.066	-0.061	-0.056	-0.044	-0.019	0.008	0.028	0.046	0.076	0.091	0.121
CP57	0.005	0.015	0.037	0.068	0.090	-0.014	-0.006	0.002	0.030	0.057	0.076	0.092	0.122	0.141	0.170
CP58	-0.047	-0.037	-0.014	0.018	0.037	-0.115	-0.109	-0.101	-0.073	-0.049	-0.033	-0.017	0.014	0.031	0.056
CP60	0.036	0.047	0.069	0.100	0.118	0.056	0.062	0.073	0.101	0.124	0.143	0.160	0.188	0.206	0.234
CP61	-0.182	-0.192	-0.181	-0.182	-0.196	-0.184	-0.197	-0.196	-0.204	-0.196	-0.185	-0.200	-0.198	-0.203	-0.193
CP62	-0.059	-0.059	-0.058	-0.046	-0.049	-0.057	-0.060	-0.059	-0.052	-0.049	-0.043	-0.045	-0.035	-0.036	-0.022
CP63	-0.028	-0.031	-0.031	-0.024	-0.026	0.026	0.019	0.019	0.025	0.026	0.030	0.025	0.034	0.033	0.043
CP64	-0.027	-0.026	-0.028	-0.023	-0.026	0.011	0.005	0.008	0.013	0.014	0.019	0.013	0.021	0.017	0.026
CP65	-0.009	-0.010	-0.014	-0.004	-0.001	0.041	0.033	0.034	0.032	0.032	0.035	0.031	0.045	0.045	0.064

Table X. Continued

Orifice Name	Point 117.	Point 118.	Point 119.	Point 122.	Point 123.	Point 124.	Point 125.	Point 126.	Point 127.	Point 128.	Point 129.	Point 130.	Point 131.	Point 132.	Point 133.
CP1	-0.219	-0.270	0.005	0.019	0.013	0.006	0.003	-0.005	-0.016	-0.029	-0.046	-0.075	-0.087	0.018	0.012
CP2	-0.317	-0.388	0.003	-0.065	-0.069	-0.071	-0.074	-0.080	-0.086	-0.097	-0.111	-0.147	-0.160	-0.096	-0.101
CP3	-0.288	-0.354	0.004	0.022	0.017	0.011	0.007	-0.003	-0.017	-0.024	-0.043	-0.090	-0.109	0.026	0.019
CP4	-0.418	-0.505	0.005	0.014	0.010	0.002	-0.003	-0.015	-0.042	-0.086	-0.095	-0.138	-0.164	0.018	0.013
CP5	-0.917	-1.050	0.002	-0.002	-0.006	-0.012	-0.018	-0.029	-0.046	-0.101	-0.172	-0.321	-0.349	0.003	-0.002
CP7	-0.623	-0.743	0.005	0.027	0.016	-0.015	-0.030	-0.052	-0.090	-0.167	-0.195	-0.217	-0.241	0.033	0.024
CP8	-0.766	-0.885	0.005	-0.004	-0.015	-0.035	-0.043	-0.057	-0.087	-0.098	-0.203	-0.273	-0.313	0.011	0.001
CP9	-0.633	-0.731	0.003	0.019	0.014	0.001	-0.004	-0.005	-0.018	-0.061	-0.135	-0.262	-0.293	0.021	0.012
CP10	-0.760	-0.888	0.001	-0.006	-0.011	-0.016	-0.017	-0.022	-0.032	-0.066	-0.180	-0.258	-0.287	-0.001	-0.007
CP11	-0.141	-0.183	0.007	0.014	0.010	0.003	0.002	-0.004	-0.011	-0.027	-0.036	-0.068	-0.079	0.024	0.021
CP12	-0.263	-0.336	0.005	0.018	0.014	0.006	0.006	0.001	-0.006	-0.018	-0.028	-0.069	-0.084	0.026	0.024
CP13	-0.225	-0.289	0.007	0.030	0.028	0.023	0.021	0.019	0.014	-0.009	-0.007	-0.054	-0.073	0.040	0.036
CP14	-0.274	-0.328	0.003	0.012	0.011	0.003	0.000	-0.003	-0.005	-0.026	-0.021	-0.068	-0.088	0.021	0.016
CP16	-0.592	-0.700	0.005	0.010	0.004	-0.004	-0.009	-0.018	-0.036	-0.108	-0.152	-0.187	-0.231	0.019	0.013
CP17	-0.860	-0.990	-0.001	-0.013	-0.017	-0.026	-0.029	-0.036	-0.049	-0.089	-0.224	-0.306	-0.328	-0.003	-0.011
CP18	-0.638	-0.750	0.001	-0.016	-0.024	-0.036	-0.038	-0.044	-0.051	-0.085	-0.183	-0.215	-0.231	-0.005	-0.016
CP20	-0.618	-0.718	0.002	-0.006	-0.018	-0.046	-0.060	-0.077	-0.104	-0.116	-0.123	-0.187	-0.205	0.000	-0.016
CP21	-0.583	-0.684	0.003	0.011	-0.002	-0.030	-0.046	-0.067	-0.103	-0.128	-0.126	-0.187	-0.213	0.018	0.000
CP22	-0.784	-0.896	0.000	-0.008	-0.014	-0.024	-0.029	-0.035	-0.049	-0.101	-0.224	-0.290	-0.318	-0.021	-0.030
CP23	-0.577	-0.669	0.005	0.000	-0.004	-0.014	-0.020	-0.028	-0.046	-0.104	-0.127	-0.197	-0.224	-0.017	-0.025
CP24	-0.213	-0.238	-0.001	-0.026	-0.028	-0.033	-0.035	-0.038	-0.045	-0.057	-0.074	-0.103	-0.118	-0.040	-0.043
CP25	-0.223	-0.279	0.005	-0.007	-0.011	-0.016	-0.017	-0.022	-0.028	-0.045	-0.068	-0.100	-0.115	-0.022	-0.024
CP26	-0.250	-0.297	0.005	-0.018	-0.023	-0.028	-0.031	-0.036	-0.046	-0.070	-0.090	-0.130	-0.149	-0.032	-0.034
CP27	-0.166	-0.222	0.004	-0.004	-0.007	-0.013	-0.013	-0.017	-0.025	-0.053	-0.074	-0.108	-0.125	-0.018	-0.018
CP28	-0.265	-0.305	0.001	-0.013	-0.018	-0.028	-0.030	-0.036	-0.042	-0.075	-0.087	-0.129	-0.150	-0.027	-0.029
CP29	-0.333	-0.398	0.005	0.000	-0.006	-0.018	-0.027	-0.040	-0.060	-0.101	-0.085	-0.149	-0.173	-0.014	-0.017
CP30	-0.527	-0.604	0.001	-0.007	-0.013	-0.026	-0.032	-0.042	-0.066	-0.133	-0.121	-0.208	-0.230	-0.024	-0.027
CP31	-0.601	-0.686	0.002	-0.001	-0.007	-0.022	-0.028	-0.039	-0.059	-0.110	-0.161	-0.242	-0.264	-0.018	-0.022
CP32	-0.834	-0.938	-0.004	-0.013	-0.021	-0.038	-0.045	-0.058	-0.082	-0.132	-0.235	-0.274	-0.293	-0.032	-0.037

Table X. Continued

Orifice Name	Point 117.	Point 118.	Point 119.	Point 122.	Point 123.	Point 124.	Point 125.	Point 126.	Point 127.	Point 128.	Point 129.	Point 130.	Point 131.	Point 132.	Point 133.
CP33	-0.875	-1.003	-0.001	0.002	-0.007	-0.037	-0.045	-0.055	-0.079	-0.151	-0.176	-0.237	-0.263	-0.017	-0.024
CP34	-0.772	-0.901	0.002	-0.001	-0.018	-0.050	-0.064	-0.083	-0.094	-0.134	-0.167	-0.238	-0.268	-0.021	-0.036
CP35	-0.759	-0.865	0.000	-0.001	-0.020	-0.061	-0.079	-0.103	-0.127	-0.141	-0.197	-0.241	-0.269	-0.027	-0.043
CP36	-0.858	-0.971	-0.003	-0.009	-0.035	-0.080	-0.103	-0.131	-0.174	-0.186	-0.187	-0.241	-0.267	-0.038	-0.060
CP37	-3.154	-3.160	-0.177	3.081	3.073	3.069	3.063	3.063	3.059	3.054	3.050	3.042	3.042	2.932	2.924
CP39	-1.342	-1.252	0.001	-0.029	-0.055	-0.098	-0.121	-0.150	-0.195	-0.251	-0.364	-0.589	-0.619	-0.016	-0.046
CP40	-1.252	-1.190	0.000	-0.051	-0.072	-0.105	-0.127	-0.153	-0.195	-0.247	-0.311	-0.582	-0.631	-0.038	-0.066
CP41	-1.027	-1.047	-0.002	-0.073	-0.092	-0.138	-0.153	-0.173	-0.208	-0.259	-0.293	-0.580	-0.647	-0.076	-0.101
CP42	-0.705	-0.797	0.003	-0.066	-0.084	-0.110	-0.124	-0.143	-0.171	-0.212	-0.238	-0.508	-0.600	-0.044	-0.067
CP43	-0.642	-0.766	0.000	-0.083	-0.099	-0.143	-0.153	-0.173	-0.198	-0.229	-0.265	-0.379	-0.494	-0.085	-0.106
CP44	-0.122	-0.120	0.002	-0.296	-0.291	-0.290	-0.289	-0.285	-0.284	-0.283	-0.292	-0.286	-0.284	-0.471	-0.474
CP45	0.305	0.327	0.003	-0.051	-0.042	-0.027	-0.023	-0.019	-0.010	0.013	0.030	0.067	0.067	-0.064	-0.063
CP46	0.210	0.229	-0.005	-0.068	-0.059	-0.042	-0.039	-0.035	-0.025	-0.003	0.014	0.056	0.054	-0.085	-0.083
CP47	0.233	0.247	-0.002	-0.071	-0.061	-0.045	-0.040	-0.035	-0.025	-0.003	0.012	0.056	0.058	-0.091	-0.087
CP48	0.145	0.156	-0.005	-0.064	-0.054	-0.037	-0.030	-0.024	-0.012	0.008	0.022	0.062	0.073	-0.083	-0.079
CP49	0.096	0.107	-0.008	-0.070	-0.060	-0.042	-0.034	-0.025	-0.012	0.009	0.024	0.062	0.079	-0.087	-0.083
CP50	0.181	0.195	0.002	-0.091	-0.070	-0.048	-0.033	-0.018	0.004	0.037	0.059	0.106	0.125	-0.114	-0.087
CP51	0.173	0.192	0.002	-0.063	-0.062	-0.045	-0.032	-0.017	0.006	0.038	0.059	0.103	0.122	-0.091	-0.080
CP52	0.162	0.177	0.002	-0.062	-0.062	-0.049	-0.038	-0.023	0.000	0.033	0.053	0.097	0.115	-0.086	-0.078
CP53	0.177	0.190	0.003	-0.049	-0.048	-0.038	-0.026	-0.011	0.012	0.044	0.062	0.106	0.125	-0.073	-0.063
CP54	0.122	0.134	0.000	-0.060	-0.060	-0.048	-0.037	-0.022	0.001	0.033	0.050	0.094	0.112	-0.086	-0.074
CP55	0.113	0.128	0.000	-0.060	-0.059	-0.047	-0.035	-0.021	0.002	0.035	0.049	0.093	0.111	-0.083	-0.072
CP56	0.151	0.173	0.001	-0.053	-0.054	-0.042	-0.034	-0.022	-0.002	0.027	0.043	0.078	0.098	-0.079	-0.069
CP57	0.201	0.221	0.004	-0.043	-0.044	-0.030	-0.025	-0.012	0.008	0.036	0.052	0.087	0.106	-0.068	-0.057
CP58	0.087	0.105	-0.004	-0.066	-0.068	-0.056	-0.048	-0.036	-0.016	0.011	0.026	0.062	0.081	-0.095	-0.084
CP60	0.261	0.284	0.008	-0.036	-0.038	-0.026	-0.018	-0.006	0.014	0.040	0.055	0.090	0.109	-0.059	-0.050
CP61	-0.186	-0.184	-0.001	-0.053	-0.060	-0.053	-0.047	-0.037	-0.015	0.021	0.040	0.083	0.099	-0.103	-0.090
CP62	-0.012	-0.009	-0.001	-0.065	-0.063	-0.052	-0.062	-0.060	-0.059	-0.051	-0.043	-0.034	-0.028	-0.071	-0.069
CP63	0.052	0.053	0.005	-0.024	-0.023	-0.021	-0.023	-0.026	-0.033	-0.034	-0.034	-0.047	-0.053	-0.039	-0.041
CP64	0.032	0.030	0.003	-0.028	-0.027	-0.028	-0.029	-0.031	-0.034	-0.033	-0.030	-0.038	-0.044	-0.039	-0.040
CP65	0.082	0.090	0.004	-0.009	-0.016	-0.034	-0.041	-0.051	-0.067	-0.095	-0.108	-0.137	-0.137	-0.026	-0.037

Table X. Continued

Orifice Name	Point 134.	Point 135.	Point 136.	Point 137.	Point 138.	Point 139.	Point 140.	Point 141.	Point 145.	Point 146.	Point 147.	Point 148.	Point 151.	Point 152.	Point 153.
CP1	0.004	0.002	0.000	-0.008	-0.026	-0.043	-0.078	-0.097	-0.010	-0.019	-0.026	-0.027	-0.032	-0.052	-0.068
CP2	-0.106	-0.109	-0.110	-0.119	-0.131	-0.146	-0.184	-0.204	-0.158	-0.162	-0.168	-0.168	-0.174	-0.193	-0.209
CP3	0.011	0.007	0.004	-0.012	-0.026	-0.039	-0.085	-0.109	0.000	-0.011	-0.023	-0.025	-0.032	-0.055	-0.072
CP4	0.003	-0.003	-0.010	-0.036	-0.092	-0.099	-0.136	-0.164	-0.008	-0.018	-0.032	-0.035	-0.057	-0.116	-0.136
CP5	-0.011	-0.017	-0.022	-0.042	-0.104	-0.176	-0.322	-0.368	-0.016	-0.026	-0.039	-0.043	-0.058	-0.118	-0.189
CP7	-0.008	-0.022	-0.046	-0.106	-0.137	-0.200	-0.225	-0.251	0.008	-0.018	-0.059	-0.069	-0.122	-0.147	-0.248
CP8	-0.021	-0.032	-0.045	-0.080	-0.086	-0.216	-0.285	-0.332	-0.020	-0.042	-0.063	-0.068	-0.103	-0.108	-0.209
CP9	-0.003	-0.010	-0.009	-0.017	-0.058	-0.143	-0.265	-0.304	-0.014	-0.033	-0.049	-0.047	-0.052	-0.087	-0.097
CP10	-0.014	-0.018	-0.021	-0.036	-0.069	-0.190	-0.264	-0.295	-0.019	-0.035	-0.046	-0.049	-0.060	-0.099	-0.135
CP11	0.015	0.010	0.009	0.001	-0.016	-0.026	-0.059	-0.073	-0.012	-0.020	-0.027	-0.026	-0.031	-0.042	-0.050
CP12	0.018	0.014	0.014	0.006	-0.013	-0.019	-0.061	-0.079	-0.009	-0.017	-0.024	-0.025	-0.028	-0.042	-0.052
CP13	0.032	0.029	0.028	0.022	0.000	-0.004	-0.047	-0.066	-0.005	-0.012	-0.019	-0.017	-0.021	-0.042	-0.053
CP14	0.010	0.006	0.007	0.001	-0.017	-0.018	-0.061	-0.080	-0.009	-0.021	-0.029	-0.030	-0.033	-0.053	-0.065
CP16	0.004	0.001	-0.004	-0.027	-0.108	-0.150	-0.190	-0.228	-0.015	-0.025	-0.037	-0.039	-0.061	-0.145	-0.177
CP17	-0.017	-0.020	-0.026	-0.040	-0.081	-0.224	-0.327	-0.333	-0.014	-0.027	-0.039	-0.044	-0.059	-0.108	-0.149
CP18	-0.029	-0.029	-0.033	-0.041	-0.081	-0.186	-0.209	-0.232	-0.018	-0.034	-0.048	-0.052	-0.063	-0.108	-0.148
CP20	-0.043	-0.055	-0.073	-0.101	-0.118	-0.123	-0.191	-0.223	-0.013	-0.043	-0.080	-0.089	-0.119	-0.125	-0.170
CP21	-0.029	-0.041	-0.064	-0.105	-0.130	-0.128	-0.196	-0.233	-0.002	-0.031	-0.070	-0.081	-0.123	-0.149	-0.176
CP22	-0.040	-0.043	-0.052	-0.067	-0.110	-0.234	-0.283	-0.310	-0.021	-0.036	-0.048	-0.052	-0.068	-0.126	-0.184
CP23	-0.035	-0.041	-0.047	-0.070	-0.120	-0.136	-0.218	-0.259	-0.003	-0.021	-0.039	-0.041	-0.063	-0.134	-0.176
CP24	-0.037	-0.038	-0.040	-0.049	-0.061	-0.072	-0.097	-0.114	0.001	-0.024	-0.046	-0.054	-0.077	-0.096	-0.102
CP25	-0.019	-0.022	-0.022	-0.034	-0.048	-0.061	-0.092	-0.117	-0.001	-0.022	-0.045	-0.049	-0.069	-0.091	-0.098
CP26	-0.036	-0.041	-0.036	-0.050	-0.074	-0.080	-0.126	-0.148	-0.007	-0.030	-0.055	-0.059	-0.082	-0.108	-0.112
CP27	-0.022	-0.027	-0.023	-0.036	-0.053	-0.064	-0.104	-0.117	-0.001	-0.020	-0.042	-0.047	-0.069	-0.093	-0.095
CP28	-0.038	-0.044	-0.041	-0.054	-0.072	-0.076	-0.127	-0.141	0.005	-0.022	-0.047	-0.055	-0.078	-0.106	-0.102
CP29	-0.029	-0.037	-0.044	-0.075	-0.097	-0.072	-0.148	-0.173	0.002	-0.023	-0.057	-0.066	-0.103	-0.147	-0.130
CP30	-0.040	-0.047	-0.048	-0.083	-0.134	-0.111	-0.205	-0.239	0.005	-0.023	-0.052	-0.060	-0.100	-0.189	-0.195
CP31	-0.037	-0.043	-0.045	-0.072	-0.113	-0.156	-0.244	-0.275	0.003	-0.025	-0.053	-0.061	-0.094	-0.170	-0.217
CP32	-0.056	-0.062	-0.065	-0.095	-0.133	-0.250	-0.288	-0.319	0.007	-0.027	-0.056	-0.067	-0.106	-0.178	-0.241

Table X. Continued

Orifice Name	Point 134.	Point 135.	Point 136.	Point 137.	Point 138.	Point 139.	Point 140.	Point 141.	Point 145.	Point 146.	Point 147.	Point 148.	Point 151.	Point 152.	Point 153.
CP33	-0.055	-0.065	-0.061	-0.090	-0.171	-0.211	-0.250	-0.282	0.007	-0.027	-0.061	-0.071	-0.111	-0.170	-0.251
CP34	-0.073	-0.084	-0.093	-0.100	-0.164	-0.186	-0.244	-0.269	0.001	-0.052	-0.098	-0.111	-0.135	-0.168	-0.237
CP35	-0.087	-0.103	-0.117	-0.137	-0.177	-0.192	-0.241	-0.273	0.002	-0.055	-0.116	-0.131	-0.164	-0.171	-0.233
CP36	-0.110	-0.131	-0.153	-0.195	-0.193	-0.191	-0.240	-0.267	0.010	-0.062	-0.137	-0.157	-0.219	-0.238	-0.220
CP37	2.923	2.914	2.910	2.908	2.900	2.899	2.892	2.885	3.960	3.917	3.918	3.860	3.796	3.788	3.773
CP39	-0.097	-0.121	-0.154	-0.203	-0.286	-0.473	-0.686	-0.731	-0.034	-0.099	-0.174	-0.200	-0.254	-0.486	-0.717
CP40	-0.107	-0.130	-0.156	-0.210	-0.251	-0.362	-0.694	-0.764	-0.052	-0.107	-0.162	-0.178	-0.254	-0.324	-0.538
CP41	-0.138	-0.153	-0.180	-0.230	-0.261	-0.292	-0.660	-0.767	-0.073	-0.118	-0.162	-0.177	-0.237	-0.332	-0.346
CP42	-0.106	-0.120	-0.142	-0.177	-0.215	-0.208	-0.410	-0.583	-0.037	-0.064	-0.099	-0.104	-0.104	-0.223	-0.242
CP43	-0.138	-0.153	-0.175	-0.209	-0.234	-0.246	-0.218	-0.297	-0.049	-0.071	-0.086	-0.090	-0.096	-0.063	-0.101
CP44	-0.468	-0.473	-0.464	-0.463	-0.465	-0.460	-0.462	-0.449	-0.742	-0.719	-0.714	-0.708	-0.704	-0.709	-0.705
CP45	-0.049	-0.040	-0.029	0.015	0.010	0.021	0.053	0.069	-0.079	-0.054	-0.031	-0.025	-0.003	0.026	0.044
CP46	-0.065	-0.059	-0.048	0.000	-0.005	0.005	0.038	0.055	-0.072	-0.052	-0.028	-0.026	-0.006	0.024	0.041
CP47	-0.067	-0.059	-0.049	0.002	-0.002	0.008	0.042	0.059	-0.089	-0.064	-0.038	-0.034	-0.012	0.020	0.036
CP48	-0.057	-0.049	-0.037	0.014	0.010	0.021	0.054	0.072	-0.067	-0.044	-0.019	-0.015	0.005	0.038	0.053
CP49	-0.058	-0.051	-0.038	0.014	0.012	0.024	0.059	0.076	-0.065	-0.042	-0.016	-0.013	0.009	0.041	0.058
CP50	-0.060	-0.054	-0.037	-0.003	0.056	0.100	0.146	0.161	-0.172	-0.105	-0.065	-0.056	-0.027	0.012	0.033
CP51	-0.056	-0.051	-0.034	0.000	0.057	0.100	0.144	0.159	-0.140	-0.097	-0.060	-0.050	-0.022	0.016	0.035
CP52	-0.061	-0.055	-0.039	-0.006	0.052	0.095	0.137	0.152	-0.134	-0.099	-0.063	-0.054	-0.028	0.009	0.029
CP53	-0.047	-0.042	-0.025	0.006	0.064	0.108	0.147	0.162	-0.122	-0.088	-0.055	-0.047	-0.020	0.015	0.034
CP54	-0.057	-0.053	-0.037	-0.006	0.052	0.096	0.134	0.149	-0.119	-0.087	-0.054	-0.047	-0.023	0.012	0.031
CP55	-0.056	-0.052	-0.035	-0.005	0.053	0.096	0.134	0.147	-0.121	-0.087	-0.053	-0.047	-0.023	0.011	0.030
CP56	-0.051	-0.048	-0.034	-0.010	0.048	0.089	0.122	0.136	-0.110	-0.079	-0.052	-0.046	-0.026	0.004	0.020
CP57	-0.040	-0.036	-0.022	0.000	0.060	0.100	0.132	0.145	-0.108	-0.075	-0.048	-0.041	-0.021	0.009	0.025
CP58	-0.066	-0.062	-0.049	-0.026	0.033	0.073	0.104	0.116	-0.113	-0.084	-0.057	-0.054	-0.036	-0.007	0.009
CP60	-0.030	-0.027	-0.014	0.010	0.069	0.111	0.137	0.148	-0.118	-0.083	-0.056	-0.048	-0.025	0.005	0.020
CP61	-0.064	-0.057	-0.043	-0.022	0.024	0.061	0.124	0.135	-0.083	-0.060	-0.038	-0.035	-0.020	0.006	0.018
CP62	-0.067	-0.063	-0.059	-0.060	-0.053	-0.054	-0.049	-0.043	0.010	0.010	0.011	0.010	0.012	0.016	0.017
CP63	-0.039	-0.037	-0.034	-0.036	-0.042	-0.046	-0.056	-0.062	0.007	0.008	0.009	0.011	0.015	0.020	0.024
CP64	-0.040	-0.038	-0.035	-0.037	-0.039	-0.043	-0.055	-0.063	0.024	0.024	0.024	0.026	0.029	0.034	0.035
CP65	-0.047	-0.052	-0.060	-0.080	-0.105	-0.117	-0.152	-0.167	0.020	0.017	0.016	0.017	0.019	0.023	0.032

Table X. Continued

Orifice Name	Point 154.	Point 155.	Point 156.	Point 157.	Point 158.	Point 159.	Point 160.	Point 161.	Point 162.	Point 163.	Point 164.	Point 165.	Point 166.	Point 167.	Point 168.
CP1	-0.111	-0.152	-0.006	-0.008	-0.014	-0.015	-0.017	-0.037	-0.052	-0.072	-0.100	-0.146	-0.001	-0.004	-0.011
CP2	-0.255	-0.300	-0.051	-0.059	-0.053	-0.060	-0.049	-0.082	-0.098	-0.117	-0.120	-0.172	-0.044	-0.044	-0.051
CP3	-0.121	-0.168	0.003	0.000	-0.008	-0.009	-0.016	-0.038	-0.056	-0.078	-0.110	-0.167	0.007	0.005	-0.004
CP4	-0.179	-0.232	-0.004	-0.006	-0.016	-0.018	-0.025	-0.063	-0.114	-0.145	-0.165	-0.236	0.000	-0.003	-0.013
CP5	-0.377	-0.451	-0.018	-0.020	-0.028	-0.031	-0.035	-0.065	-0.114	-0.190	-0.363	-0.474	-0.015	-0.019	-0.028
CP7	-0.265	-0.333	0.014	0.004	-0.024	-0.037	-0.058	-0.125	-0.150	-0.256	-0.255	-0.337	0.018	0.008	-0.022
CP8	-0.319	-0.408	-0.019	-0.026	-0.044	-0.050	-0.060	-0.110	-0.114	-0.188	-0.311	-0.422	-0.015	-0.024	-0.042
CP9	-0.294	-0.367	-0.014	-0.019	-0.038	-0.042	-0.045	-0.056	-0.085	-0.093	-0.288	-0.369	-0.009	-0.018	-0.035
CP10	-0.306	-0.359	-0.018	-0.022	-0.033	-0.035	-0.039	-0.066	-0.099	-0.123	-0.298	-0.360	-0.013	-0.019	-0.031
CP11	-0.071	-0.082	-0.004	-0.006	-0.013	-0.014	-0.015	-0.036	-0.047	-0.060	-0.074	-0.107	0.004	0.000	-0.008
CP12	-0.077	-0.099	-0.003	-0.005	-0.012	-0.013	-0.015	-0.036	-0.047	-0.063	-0.079	-0.127	0.003	-0.001	-0.009
CP13	-0.074	-0.100	0.005	0.004	-0.002	-0.004	-0.007	-0.027	-0.046	-0.064	-0.077	-0.127	0.011	0.009	0.001
CP14	-0.085	-0.106	-0.007	-0.010	-0.018	-0.020	-0.022	-0.042	-0.060	-0.079	-0.090	-0.138	-0.002	-0.007	-0.017
CP16	-0.213	-0.280	-0.008	-0.011	-0.022	-0.025	-0.030	-0.067	-0.146	-0.170	-0.210	-0.306	-0.004	-0.008	-0.019
CP17	-0.337	-0.385	-0.020	-0.023	-0.033	-0.035	-0.039	-0.069	-0.114	-0.136	-0.344	-0.412	-0.019	-0.023	-0.033
CP18	-0.217	-0.258	-0.021	-0.025	-0.039	-0.042	-0.045	-0.070	-0.109	-0.127	-0.217	-0.281	-0.018	-0.024	-0.037
CP20	-0.224	-0.278	-0.012	-0.024	-0.052	-0.062	-0.079	-0.126	-0.136	-0.195	-0.221	-0.285	-0.009	-0.021	-0.050
CP21	-0.238	-0.303	0.002	-0.008	-0.038	-0.049	-0.070	-0.129	-0.166	-0.202	-0.231	-0.306	0.006	-0.005	-0.036
CP22	-0.285	-0.366	-0.024	-0.027	-0.036	-0.041	-0.045	-0.076	-0.131	-0.162	-0.288	-0.372	-0.021	-0.024	-0.037
CP23	-0.208	-0.274	0.000	-0.006	-0.021	-0.026	-0.033	-0.073	-0.147	-0.171	-0.228	-0.311	0.005	-0.003	-0.019
CP24	-0.126	-0.151	-0.008	-0.016	-0.031	-0.038	-0.044	-0.081	-0.113	-0.136	-0.163	-0.192	-0.009	-0.015	-0.031
CP25	-0.132	-0.173	0.002	-0.005	-0.020	-0.026	-0.034	-0.070	-0.104	-0.128	-0.164	-0.210	0.006	-0.001	-0.016
CP26	-0.161	-0.208	-0.006	-0.013	-0.030	-0.036	-0.043	-0.082	-0.118	-0.147	-0.192	-0.246	-0.001	-0.010	-0.026
CP27	-0.143	-0.177	0.016	0.009	-0.003	-0.010	-0.015	-0.054	-0.087	-0.114	-0.158	-0.195	0.020	0.014	-0.001
CP28	-0.155	-0.197	-0.001	-0.011	-0.028	-0.034	-0.043	-0.081	-0.119	-0.145	-0.191	-0.236	0.000	-0.008	-0.027
CP29	-0.186	-0.243	0.003	-0.005	-0.025	-0.034	-0.051	-0.103	-0.160	-0.182	-0.217	-0.281	0.007	-0.001	-0.022
CP30	-0.240	-0.310	-0.001	-0.010	-0.029	-0.039	-0.049	-0.103	-0.203	-0.229	-0.272	-0.347	0.000	-0.010	-0.029
CP31	-0.277	-0.350	-0.001	-0.011	-0.030	-0.039	-0.049	-0.096	-0.179	-0.220	-0.312	-0.384	0.001	-0.008	-0.029
CP32	-0.317	-0.393	-0.007	-0.020	-0.040	-0.049	-0.061	-0.113	-0.190	-0.242	-0.357	-0.432	-0.010	-0.020	-0.042

Table X. Continued

Orifice Name	Point 154.	Point 155.	Point 156.	Point 157.	Point 158.	Point 159.	Point 160.	Point 161.	Point 162.	Point 163.	Point 164.	Point 165.	Point 166.	Point 167.	Point 168.
CP33	-0.296	-0.371	-0.001	-0.016	-0.040	-0.049	-0.063	-0.117	-0.184	-0.290	-0.336	-0.413	-0.002	-0.015	-0.040
CP34	-0.301	-0.345	-0.005	-0.028	-0.064	-0.081	-0.102	-0.143	-0.192	-0.303	-0.342	-0.396	-0.003	-0.025	-0.066
CP35	-0.292	-0.339	-0.007	-0.031	-0.078	-0.099	-0.127	-0.176	-0.200	-0.289	-0.340	-0.399	-0.007	-0.033	-0.080
CP36	-0.272	-0.329	-0.004	-0.037	-0.093	-0.120	-0.156	-0.241	-0.287	-0.274	-0.324	-0.393	-0.007	-0.039	-0.097
CP37	3.771	3.762	3.715	3.740	3.713	3.727	3.714	3.689	3.705	3.691	3.672	3.652	3.630	3.622	3.616
CP39	-0.921	-1.013	-0.031	-0.058	-0.098	-0.124	-0.153	-0.220	-0.494	-0.779	-1.002	-1.111	-0.027	-0.052	-0.094
CP40	-0.938	-1.123	-0.046	-0.072	-0.107	-0.126	-0.149	-0.207	-0.218	-0.526	-1.007	-1.246	-0.039	-0.063	-0.102
CP41	-0.867	-1.117	-0.072	-0.089	-0.117	-0.129	-0.144	-0.190	-0.183	-0.152	-0.730	-1.191	-0.066	-0.082	-0.112
CP42	-0.426	-0.800	-0.031	-0.041	-0.070	-0.078	-0.088	-0.121	-0.106	-0.058	-0.020	-0.638	-0.026	-0.036	-0.064
CP43	-0.247	-0.440	-0.051	-0.059	-0.072	-0.079	-0.084	-0.108	-0.104	-0.085	-0.041	-0.191	-0.048	-0.056	-0.071
CP44	-0.702	-0.705	-0.145	-0.182	-0.148	-0.168	-0.123	-0.188	-0.200	-0.207	-0.120	-0.163	-0.155	-0.156	-0.149
CP45	0.079	0.109	-0.077	-0.062	-0.042	-0.033	-0.020	-0.014	0.015	0.029	0.074	0.101	-0.070	-0.058	-0.040
CP46	0.076	0.106	-0.086	-0.072	-0.051	-0.042	-0.028	-0.022	0.008	0.021	0.066	0.093	-0.084	-0.071	-0.054
CP47	0.071	0.101	-0.096	-0.081	-0.059	-0.048	-0.035	-0.027	0.005	0.018	0.064	0.090	-0.093	-0.079	-0.059
CP48	0.088	0.116	-0.082	-0.066	-0.044	-0.035	-0.019	-0.011	0.021	0.034	0.078	0.103	-0.082	-0.067	-0.048
CP49	0.094	0.123	-0.084	-0.068	-0.044	-0.035	-0.019	-0.009	0.023	0.037	0.082	0.106	-0.085	-0.072	-0.051
CP50	0.070	0.101	-0.143	-0.104	-0.069	-0.056	-0.039	-0.030	0.007	0.025	0.073	0.100	-0.125	-0.091	-0.061
CP51	0.072	0.100	-0.105	-0.088	-0.063	-0.051	-0.034	-0.025	0.010	0.028	0.075	0.100	-0.087	-0.075	-0.054
CP52	0.064	0.092	-0.102	-0.088	-0.066	-0.054	-0.037	-0.030	0.003	0.021	0.067	0.092	-0.085	-0.077	-0.057
CP53	0.068	0.098	-0.092	-0.077	-0.055	-0.045	-0.029	-0.022	0.010	0.026	0.072	0.097	-0.074	-0.066	-0.047
CP54	0.065	0.093	-0.094	-0.079	-0.058	-0.047	-0.032	-0.026	0.006	0.021	0.066	0.090	-0.079	-0.068	-0.051
CP55	0.062	0.089	-0.094	-0.078	-0.056	-0.047	-0.032	-0.028	0.004	0.020	0.064	0.087	-0.078	-0.067	-0.050
CP56	0.049	0.074	-0.081	-0.068	-0.052	-0.043	-0.031	-0.030	-0.003	0.010	0.050	0.072	-0.068	-0.058	-0.045
CP57	0.054	0.079	-0.074	-0.060	-0.044	-0.036	-0.024	-0.022	0.004	0.017	0.058	0.080	-0.058	-0.048	-0.036
CP58	0.037	0.060	-0.093	-0.078	-0.062	-0.054	-0.042	-0.042	-0.016	-0.004	0.036	0.058	-0.082	-0.071	-0.058
CP60	0.049	0.072	-0.075	-0.061	-0.045	-0.036	-0.024	-0.023	0.003	0.015	0.054	0.075	-0.056	-0.046	-0.033
CP61	0.035	0.052	-0.061	-0.050	-0.036	-0.029	-0.018	-0.022	0.000	0.011	0.047	0.061	-0.050	-0.043	-0.031
CP62	0.006	-0.016	-0.004	-0.002	0.001	0.001	0.006	-0.006	-0.002	0.001	0.016	0.010	-0.009	-0.005	-0.005
CP63	0.007	-0.037	0.003	0.005	0.008	0.008	0.012	0.000	0.004	0.005	0.019	0.009	0.003	0.005	0.006
CP64	0.017	-0.029	0.016	0.020	0.019	0.023	0.025	0.014	0.018	0.021	0.031	0.023	0.017	0.018	0.018
CP65	0.050	0.006	0.015	0.015	0.015	0.016	0.016	0.002	0.002	0.001	0.019	0.023	0.015	0.015	0.012

Table X. Continued

Orifice Name	Point 169.	Point 170.	Point 171.	Point 172.	Point 173.	Point 174.	Point 175.	Point 176.	Point 177.	Point 178.	Point 179.	Point 180.	Point 181.	Point 182.	Point 183.
CP1	-0.017	-0.016	-0.028	-0.041	-0.063	-0.101	-0.136	-0.152	0.004	-0.003	-0.007	-0.008	-0.015	-0.024	-0.038
CP2	-0.057	-0.054	-0.068	-0.079	-0.101	-0.134	-0.170	-0.187	-0.045	-0.050	-0.053	-0.052	-0.060	-0.068	-0.082
CP3	-0.011	-0.014	-0.029	-0.047	-0.068	-0.110	-0.155	-0.176	0.013	0.006	-0.001	-0.002	-0.012	-0.025	-0.042
CP4	-0.021	-0.023	-0.052	-0.102	-0.137	-0.165	-0.225	-0.252	0.007	0.000	-0.009	-0.011	-0.022	-0.048	-0.096
CP5	-0.035	-0.035	-0.057	-0.101	-0.179	-0.376	-0.468	-0.509	-0.011	-0.019	-0.024	-0.028	-0.036	-0.056	-0.096
CP7	-0.039	-0.057	-0.115	-0.137	-0.225	-0.258	-0.329	-0.362	0.025	0.011	-0.017	-0.030	-0.053	-0.108	-0.133
CP8	-0.054	-0.060	-0.103	-0.106	-0.147	-0.312	-0.418	-0.456	-0.010	-0.022	-0.039	-0.044	-0.060	-0.099	-0.104
CP9	-0.043	-0.046	-0.052	-0.080	-0.088	-0.285	-0.360	-0.396	-0.006	-0.016	-0.031	-0.037	-0.044	-0.047	-0.077
CP10	-0.038	-0.038	-0.056	-0.088	-0.108	-0.307	-0.363	-0.388	-0.008	-0.017	-0.026	-0.029	-0.038	-0.053	-0.085
CP11	-0.013	-0.014	-0.027	-0.037	-0.052	-0.079	-0.105	-0.117	0.011	0.003	-0.002	-0.004	-0.012	-0.021	-0.034
CP12	-0.014	-0.014	-0.025	-0.038	-0.056	-0.086	-0.126	-0.146	0.009	0.001	-0.005	-0.005	-0.012	-0.022	-0.036
CP13	-0.005	-0.004	-0.017	-0.035	-0.058	-0.083	-0.125	-0.143	0.020	0.012	0.007	0.006	-0.001	-0.013	-0.032
CP14	-0.022	-0.022	-0.033	-0.052	-0.074	-0.100	-0.140	-0.157	0.002	-0.006	-0.013	-0.013	-0.022	-0.030	-0.050
CP16	-0.026	-0.028	-0.057	-0.131	-0.151	-0.213	-0.301	-0.339	0.002	-0.006	-0.014	-0.017	-0.027	-0.052	-0.126
CP17	-0.041	-0.042	-0.064	-0.105	-0.117	-0.356	-0.425	-0.449	-0.015	-0.024	-0.031	-0.034	-0.043	-0.063	-0.103
CP18	-0.046	-0.047	-0.063	-0.099	-0.106	-0.229	-0.283	-0.309	-0.014	-0.024	-0.034	-0.039	-0.048	-0.061	-0.096
CP20	-0.067	-0.078	-0.118	-0.132	-0.203	-0.228	-0.284	-0.312	-0.002	-0.020	-0.047	-0.056	-0.079	-0.113	-0.133
CP21	-0.053	-0.067	-0.121	-0.163	-0.212	-0.236	-0.303	-0.335	0.013	-0.003	-0.030	-0.044	-0.069	-0.116	-0.164
CP22	-0.045	-0.046	-0.069	-0.121	-0.131	-0.302	-0.386	-0.419	-0.015	-0.025	-0.034	-0.037	-0.048	-0.066	-0.117
CP23	-0.028	-0.032	-0.063	-0.132	-0.137	-0.241	-0.327	-0.364	0.012	0.000	-0.013	-0.018	-0.030	-0.058	-0.124
CP24	-0.041	-0.044	-0.068	-0.094	-0.118	-0.163	-0.206	-0.222	-0.005	-0.016	-0.028	-0.031	-0.043	-0.062	-0.086
CP25	-0.026	-0.029	-0.053	-0.081	-0.108	-0.161	-0.217	-0.242	0.011	0.002	-0.010	-0.014	-0.026	-0.043	-0.069
CP26	-0.034	-0.039	-0.065	-0.096	-0.130	-0.184	-0.251	-0.280	0.004	-0.007	-0.019	-0.023	-0.036	-0.056	-0.085
CP27	-0.009	-0.011	-0.037	-0.064	-0.097	-0.152	-0.202	-0.225	0.026	0.016	0.005	0.003	-0.008	-0.028	-0.053
CP28	-0.037	-0.042	-0.068	-0.099	-0.134	-0.188	-0.247	-0.273	0.004	-0.009	-0.023	-0.027	-0.041	-0.059	-0.089
CP29	-0.035	-0.045	-0.089	-0.138	-0.164	-0.211	-0.288	-0.322	0.013	0.000	-0.015	-0.023	-0.041	-0.080	-0.126
CP30	-0.041	-0.047	-0.089	-0.180	-0.186	-0.272	-0.363	-0.400	0.004	-0.009	-0.025	-0.031	-0.046	-0.081	-0.168
CP31	-0.039	-0.047	-0.082	-0.154	-0.172	-0.317	-0.404	-0.439	0.006	-0.008	-0.024	-0.029	-0.046	-0.073	-0.142
CP32	-0.055	-0.062	-0.102	-0.168	-0.192	-0.369	-0.459	-0.495	-0.009	-0.023	-0.041	-0.048	-0.063	-0.097	-0.159

Name	Point																			
CP33	-0.052	-0.063	-0.104	-0.165	-0.242	-0.346	-0.440	-0.475	0.001	-0.016	-0.038	-0.045	-0.061	-0.098	-0.157					
CP34	-0.084	-0.099	-0.130	-0.176	-0.337	-0.354	-0.429	-0.440	-0.475	0.001	-0.016	-0.038	-0.045	-0.061	-0.098	-0.157				
CP35	-0.103	-0.125	-0.167	-0.188	-0.303	-0.359	-0.433	-0.463	-0.004	-0.032	-0.075	-0.095	-0.125	-0.159	-0.179	-0.167				
CP36	-0.128	-0.156	-0.234	-0.284	-0.458	-0.470	-0.432	-0.470	-0.060	-0.041	-0.096	-0.120	-0.158	-0.229	-0.278	-0.278				
CP37	3.610	3.613	3.596	3.598	3.587	3.580	3.571	3.575	3.493	3.478	3.475	3.467	3.467	3.451	3.451	-0.134	-0.134	-0.135	-0.135	-0.135
CP39	-0.121	-0.142	-0.193	-0.439	-1.131	-1.141	-1.141	-1.141	-0.058	-0.032	-0.058	-0.095	-0.110	-0.137	-0.179	-0.179	-0.171	-0.171	-0.171	-0.171
CP40	-0.124	-0.140	-0.183	-0.170	-0.158	-0.119	-0.095	-0.459	-1.042	-1.349	-1.107	-0.079	-0.115	-0.135	-0.163	-0.153	-0.153	-0.153	-0.153	-0.153
CP41	-0.127	-0.138	-0.170	-0.158	-0.119	-0.095	-0.060	-0.406	-0.079	-0.153	-1.053	-0.115	-0.135	-0.155	-0.163	-0.153	-0.153	-0.153	-0.153	-0.153
CP42	-0.077	-0.083	-0.106	-0.106	-0.093	-0.093	-0.052	-0.052	-0.014	-0.034	-0.273	-0.438	-0.056	-0.063	-0.078	-0.098	-0.089	-0.089	-0.089	-0.089
CP43	-0.081	-0.084	-0.100	-0.167	-0.097	-0.086	-0.053	-0.053	-0.053	-0.067	-0.067	-0.043	-0.043	-0.071	-0.084	-0.097	-0.095	-0.095	-0.095	-0.095
CP44	-0.154	-0.143	-0.167	-0.165	-0.179	-0.179	-0.166	-0.166	-0.166	-0.166	-0.166	-0.166	-0.171	-0.171	-0.174	-0.174	-0.174	-0.174	-0.174	-0.174
CP45	-0.034	-0.022	-0.008	-0.020	-0.032	-0.032	-0.062	-0.095	-0.112	-0.061	-0.053	-0.027	-0.027	-0.021	-0.007	-0.019	-0.019	-0.019	-0.019	-0.019
CP46	-0.048	-0.035	-0.020	-0.008	-0.019	-0.019	-0.051	-0.084	-0.099	-0.079	-0.079	-0.072	-0.072	-0.041	-0.035	-0.023	-0.004	-0.004	-0.004	-0.004
CP47	-0.055	-0.039	-0.023	-0.017	-0.006	-0.017	-0.050	-0.084	-0.098	-0.082	-0.082	-0.078	-0.078	-0.041	-0.035	-0.025	-0.003	-0.003	-0.003	-0.003
CP48	-0.041	-0.027	-0.010	-0.020	-0.030	-0.030	-0.063	-0.094	-0.108	-0.077	-0.077	-0.068	-0.068	-0.037	-0.032	-0.012	-0.011	-0.011	-0.011	-0.011
CP49	-0.042	-0.029	-0.011	-0.021	-0.032	-0.032	-0.064	-0.095	-0.111	-0.074	-0.074	-0.064	-0.064	-0.035	-0.035	-0.015	-0.016	-0.016	-0.016	-0.016
CP50	-0.053	-0.037	-0.019	-0.015	-0.029	-0.029	-0.064	-0.097	-0.113	-0.074	-0.074	-0.064	-0.064	-0.041	-0.041	-0.014	-0.017	-0.017	-0.017	-0.017
CP51	-0.047	-0.031	-0.013	-0.011	-0.019	-0.019	-0.063	-0.096	-0.111	-0.073	-0.073	-0.067	-0.067	-0.047	-0.047	-0.020	-0.020	-0.020	-0.020	-0.020
CP52	-0.050	-0.035	-0.019	-0.012	-0.025	-0.025	-0.058	-0.089	-0.103	-0.074	-0.074	-0.067	-0.067	-0.049	-0.049	-0.028	-0.015	-0.015	-0.015	-0.015
CP53	-0.041	-0.027	-0.011	-0.011	-0.019	-0.019	-0.052	-0.083	-0.100	-0.071	-0.071	-0.061	-0.061	-0.044	-0.044	-0.013	-0.013	-0.013	-0.013	-0.013
CP54	-0.045	-0.031	-0.017	-0.013	-0.024	-0.024	-0.055	-0.086	-0.100	-0.071	-0.071	-0.062	-0.062	-0.044	-0.044	-0.013	-0.013	-0.013	-0.013	-0.013
CP55	-0.044	-0.031	-0.016	-0.011	-0.023	-0.023	-0.052	-0.083	-0.096	-0.067	-0.067	-0.057	-0.057	-0.039	-0.039	-0.013	-0.011	-0.011	-0.011	-0.011
CP56	-0.041	-0.030	-0.011	-0.011	-0.020	-0.020	-0.047	-0.076	-0.089	-0.047	-0.047	-0.039	-0.039	-0.029	-0.029	-0.007	-0.005	-0.005	-0.005	-0.005
CP57	-0.033	-0.020	-0.011	-0.011	-0.012	-0.012	-0.035	-0.069	-0.081	-0.041	-0.041	-0.025	-0.025	-0.022	-0.022	-0.007	-0.015	-0.015	-0.015	-0.015
CP58	-0.056	-0.043	-0.018	-0.012	-0.022	-0.022	-0.048	-0.074	-0.087	-0.041	-0.041	-0.025	-0.025	-0.047	-0.047	-0.014	-0.014	-0.014	-0.014	-0.014
CP59	-0.007	-0.001	-0.004	-0.002	-0.005	-0.005	-0.008	-0.011	-0.011	-0.007	-0.007	-0.006	-0.006	-0.008	-0.008	-0.006	-0.006	-0.006	-0.006	-0.006
CP60	-0.029	-0.019	-0.008	-0.008	-0.013	-0.013	-0.023	-0.048	-0.059	-0.037	-0.037	-0.023	-0.023	-0.014	-0.014	-0.007	-0.007	-0.007	-0.007	-0.007
CP61	-0.022	-0.019	-0.008	-0.008	-0.013	-0.013	-0.023	-0.048	-0.059	-0.037	-0.037	-0.023	-0.023	-0.014	-0.014	-0.007	-0.007	-0.007	-0.007	-0.007
CP62	-0.007	-0.001	-0.004	-0.002	-0.005	-0.005	-0.008	-0.011	-0.011	-0.007	-0.007	-0.006	-0.006	-0.008	-0.008	-0.006	-0.006	-0.006	-0.006	-0.006
CP63	-0.003	-0.009	-0.005	-0.005	-0.007	-0.007	-0.008	-0.010	-0.010	-0.007	-0.007	-0.006	-0.006	-0.008	-0.008	-0.006	-0.006	-0.006	-0.006	-0.006
CP64	-0.017	-0.020	-0.018	-0.012	-0.015	-0.015	-0.006	-0.011	-0.011	-0.007	-0.007	-0.004	-0.004	-0.014	-0.014	-0.007	-0.007	-0.007	-0.007	-0.007
CP65	0.008	0.012	0.006	0.006	0.003	0.003	0.006	0.013	0.013	0.017	0.017	0.014	0.014	0.014	0.014	0.007	0.007	0.007	0.007	0.007

Table X. Continued

Table X. Continued

Orifice Name	Point 184.	Point 185.	Point 186.	Point 187.	Point 188.	Point 189.	Point 190.	Point 191.	Point 192.	Point 193.	Point 194.	Point 195.	Point 196.	Point 197.	Point 198.
CP1	-0.054	-0.095	-0.130	-0.139	0.007	0.001	-0.008	-0.008	-0.014	-0.020	-0.031	-0.051	-0.063	-0.125	-0.134
CP2	-0.096	-0.136	-0.169	-0.178	-0.045	-0.048	-0.057	-0.054	-0.061	-0.066	-0.077	-0.094	-0.103	-0.165	-0.175
CP3	-0.060	-0.105	-0.147	-0.157	0.017	0.010	-0.002	-0.003	-0.012	-0.021	-0.038	-0.059	-0.070	-0.139	-0.152
CP4	-0.128	-0.157	-0.214	-0.229	0.010	0.003	-0.010	-0.013	-0.021	-0.043	-0.091	-0.126	-0.133	-0.206	-0.220
CP5	-0.164	-0.374	-0.468	-0.486	-0.011	-0.017	-0.028	-0.029	-0.037	-0.052	-0.090	-0.157	-0.211	-0.468	-0.489
CP7	-0.178	-0.253	-0.324	-0.340	0.028	0.014	-0.017	-0.029	-0.055	-0.102	-0.127	-0.158	-0.275	-0.320	-0.336
CP8	-0.122	-0.308	-0.418	-0.437	-0.007	-0.019	-0.040	-0.046	-0.061	-0.096	-0.100	-0.120	-0.272	-0.418	-0.438
CP9	-0.087	-0.281	-0.355	-0.369	-0.004	-0.016	-0.032	-0.036	-0.043	-0.045	-0.074	-0.093	-0.136	-0.348	-0.364
CP10	-0.100	-0.312	-0.367	-0.382	-0.007	-0.015	-0.029	-0.030	-0.036	-0.049	-0.078	-0.107	-0.173	-0.372	-0.388
CP11	-0.044	-0.076	-0.103	-0.110	0.014	0.008	-0.003	-0.003	-0.009	-0.017	-0.027	-0.042	-0.051	-0.101	-0.108
CP12	-0.048	-0.084	-0.124	-0.134	0.012	0.006	-0.004	-0.006	-0.010	-0.018	-0.031	-0.048	-0.053	-0.121	-0.131
CP13	-0.049	-0.081	-0.122	-0.131	0.023	0.017	0.007	0.006	0.001	-0.008	-0.025	-0.046	-0.049	-0.119	-0.129
CP14	-0.068	-0.098	-0.140	-0.149	0.005	-0.002	-0.014	-0.015	-0.022	-0.027	-0.046	-0.067	-0.068	-0.139	-0.150
CP16	-0.141	-0.207	-0.298	-0.316	0.005	-0.002	-0.014	-0.017	-0.026	-0.047	-0.119	-0.153	-0.208	-0.290	-0.311
CP17	-0.106	-0.356	-0.424	-0.441	-0.015	-0.022	-0.034	-0.036	-0.045	-0.060	-0.098	-0.115	-0.219	-0.426	-0.445
CP18	-0.095	-0.230	-0.286	-0.299	-0.013	-0.020	-0.037	-0.040	-0.048	-0.058	-0.092	-0.095	-0.208	-0.286	-0.300
CP20	-0.206	-0.228	-0.283	-0.298	-0.001	-0.015	-0.047	-0.059	-0.079	-0.111	-0.132	-0.210	-0.189	-0.283	-0.296
CP21	-0.218	-0.235	-0.301	-0.317	0.015	0.001	-0.031	-0.045	-0.067	-0.111	-0.161	-0.220	-0.185	-0.299	-0.316
CP22	-0.113	-0.302	-0.386	-0.404	-0.013	-0.023	-0.036	-0.039	-0.047	-0.063	-0.111	-0.119	-0.249	-0.385	-0.403
CP23	-0.109	-0.237	-0.326	-0.344	0.012	0.004	-0.014	-0.018	-0.028	-0.051	-0.114	-0.113	-0.203	-0.320	-0.338
CP24	-0.100	-0.146	-0.184	-0.194	-0.006	-0.015	-0.030	-0.033	-0.042	-0.056	-0.075	-0.093	-0.105	-0.165	-0.177
CP25	-0.087	-0.138	-0.190	-0.205	0.015	0.007	-0.010	-0.012	-0.021	-0.035	-0.056	-0.076	-0.088	-0.169	-0.183
CP26	-0.112	-0.163	-0.224	-0.239	0.007	-0.002	-0.019	-0.022	-0.032	-0.048	-0.072	-0.100	-0.101	-0.200	-0.215
CP27	-0.079	-0.133	-0.177	-0.189	0.029	0.020	0.007	0.005	-0.004	-0.019	-0.040	-0.066	-0.066	-0.154	-0.166
CP28	-0.117	-0.167	-0.223	-0.237	0.004	-0.005	-0.024	-0.028	-0.037	-0.052	-0.079	-0.107	-0.097	-0.201	-0.215
CP29	-0.138	-0.189	-0.263	-0.281	0.014	0.007	-0.015	-0.022	-0.038	-0.071	-0.115	-0.130	-0.110	-0.239	-0.257
CP30	-0.149	-0.251	-0.342	-0.360	0.004	-0.006	-0.027	-0.031	-0.044	-0.073	-0.156	-0.145	-0.180	-0.321	-0.340
CP31	-0.135	-0.300	-0.388	-0.406	0.007	-0.004	-0.025	-0.031	-0.042	-0.064	-0.129	-0.125	-0.230	-0.371	-0.390
CP32	-0.152	-0.362	-0.452	-0.472	-0.010	-0.022	-0.044	-0.050	-0.063	-0.091	-0.148	-0.143	-0.313	-0.444	-0.464

Table X. Continued

Orifice Name	Point 184.	Point 185.	Point 186.	Point 187.	Point 188.	Point 189.	Point 190.	Point 191.	Point 192.	Point 193.	Point 194.	Point 195.	Point 196.	Point 197.	Point 198.
CP33	-0.189	-0.339	-0.436	-0.456	0.000	-0.015	-0.040	-0.045	-0.060	-0.092	-0.147	-0.167	-0.305	-0.428	-0.450
CP34	-0.369	-0.344	-0.424	-0.440	0.002	-0.019	-0.060	-0.073	-0.095	-0.114	-0.157	-0.373	-0.275	-0.410	-0.429
CP35	-0.312	-0.352	-0.430	-0.448	-0.005	-0.029	-0.079	-0.095	-0.125	-0.152	-0.172	-0.318	-0.278	-0.417	-0.436
CP36	-0.286	-0.346	-0.436	-0.456	-0.008	-0.040	-0.099	-0.123	-0.161	-0.223	-0.269	-0.281	-0.275	-0.426	-0.447
CP37	3.436	3.422	3.412	3.397	3.323	3.318	3.305	3.309	3.298	3.292	3.295	3.282	3.278	3.271	3.261
CP39	-0.732	-1.082	-1.157	-1.144	-0.019	-0.045	-0.087	-0.104	-0.134	-0.168	-0.307	-0.689	-0.809	-1.241	-1.225
CP40	-0.357	-0.984	-1.345	-1.388	-0.029	-0.051	-0.094	-0.108	-0.131	-0.160	-0.126	-0.265	-0.434	-1.281	-1.341
CP41	-0.117	-0.231	-0.738	-0.819	-0.059	-0.076	-0.107	-0.115	-0.133	-0.154	-0.149	-0.120	-0.074	-0.567	-0.646
CP42	-0.054	-0.003	-0.184	-0.260	-0.016	-0.028	-0.055	-0.062	-0.076	-0.091	-0.086	-0.059	-0.019	-0.121	-0.183
CP43	-0.088	-0.050	-0.111	-0.138	-0.042	-0.053	-0.068	-0.071	-0.083	-0.093	-0.092	-0.090	-0.066	-0.096	-0.119
CP44	-0.186	-0.190	-0.195	-0.184	-0.173	-0.191	-0.193	-0.199	-0.170	-0.179	-0.180	-0.186	-0.185	-0.178	-0.191
CP45	0.033	0.061	0.094	0.100	-0.057	-0.049	-0.037	-0.027	-0.020	-0.005	0.020	0.030	0.044	0.089	0.092
CP46	0.017	0.046	0.078	0.083	-0.078	-0.071	-0.057	-0.047	-0.041	-0.024	0.003	0.011	0.025	0.071	0.074
CP47	0.018	0.046	0.076	0.083	-0.085	-0.076	-0.062	-0.051	-0.043	-0.025	0.003	0.011	0.027	0.071	0.075
CP48	0.029	0.057	0.087	0.093	-0.077	-0.068	-0.052	-0.042	-0.034	-0.015	0.013	0.023	0.037	0.081	0.084
CP49	0.029	0.057	0.089	0.095	-0.084	-0.075	-0.058	-0.047	-0.039	-0.018	0.012	0.022	0.035	0.081	0.084
CP50	0.032	0.063	0.095	0.102	-0.104	-0.075	-0.052	-0.041	-0.030	-0.010	0.019	0.031	0.045	0.093	0.095
CP51	0.036	0.065	0.095	0.101	-0.065	-0.061	-0.045	-0.034	-0.024	-0.007	0.022	0.032	0.046	0.093	0.095
CP52	0.029	0.056	0.087	0.092	-0.067	-0.062	-0.049	-0.038	-0.029	-0.011	0.015	0.026	0.040	0.083	0.086
CP53	0.035	0.063	0.092	0.097	-0.054	-0.050	-0.037	-0.027	-0.019	-0.002	0.024	0.034	0.047	0.089	0.091
CP54	0.027	0.054	0.083	0.086	-0.061	-0.056	-0.043	-0.034	-0.027	-0.011	0.015	0.024	0.037	0.077	0.080
CP55	0.026	0.050	0.079	0.084	-0.062	-0.056	-0.044	-0.033	-0.027	-0.011	0.013	0.023	0.036	0.074	0.077
CP56	0.017	0.039	0.065	0.069	-0.053	-0.047	-0.039	-0.031	-0.025	-0.013	0.006	0.014	0.027	0.061	0.063
CP57	0.027	0.048	0.074	0.079	-0.040	-0.035	-0.026	-0.020	-0.015	-0.003	0.018	0.025	0.036	0.071	0.074
CP58	-0.001	0.019	0.045	0.049	-0.069	-0.063	-0.056	-0.049	-0.044	-0.031	-0.013	-0.005	0.005	0.039	0.041
CP60	0.029	0.051	0.075	0.079	-0.032	-0.027	-0.020	-0.012	-0.008	0.003	0.022	0.030	0.041	0.074	0.077
CP61	0.018	0.036	0.057	0.059	-0.037	-0.034	-0.027	-0.021	-0.017	-0.007	0.011	0.016	0.025	0.053	0.054
CP62	0.001	0.004	0.009	0.009	-0.008	-0.009	-0.010	-0.007	-0.008	-0.005	0.001	-0.001	0.005	0.009	0.007
CP63	0.012	0.011	0.012	0.012	0.009	0.008	0.004	0.007	0.007	0.009	0.012	0.010	0.015	0.014	0.011
CP64	0.024	0.025	0.025	0.021	0.019	0.017	0.021	0.018	0.022	0.026	0.022	0.027	0.027	0.024	
CP65	0.007	0.007	0.012	0.013	0.019	0.016	0.011	0.011	0.010	0.008	0.009	0.005	0.007	0.011	0.009

Table X. Continued

Orifice Name	Point 199.	Point 200.	Point 201.	Point 202.	Point 203.	Point 204.	Point 205.	Point 206.	Point 207.	Point 208.	Point 209.	Point 210.	Point 211.	Point 212.	Point 213.
CP1	0.004	0.001	-0.006	-0.007	-0.012	-0.019	-0.033	-0.047	-0.086	-0.121	-0.131	0.005	-0.002	-0.006	-0.009
CP2	-0.047	-0.048	-0.055	-0.054	-0.058	-0.065	-0.078	-0.091	-0.124	-0.159	-0.171	-0.051	-0.055	-0.058	-0.061
CP3	0.013	0.009	0.000	-0.001	-0.009	-0.020	-0.039	-0.056	-0.094	-0.135	-0.147	0.013	0.006	0.000	-0.003
CP4	0.006	0.003	-0.008	-0.010	-0.019	-0.042	-0.088	-0.123	-0.145	-0.200	-0.216	0.008	0.001	-0.006	-0.013
CP5	-0.014	-0.017	-0.027	-0.029	-0.037	-0.052	-0.089	-0.148	-0.364	-0.469	-0.492	-0.016	-0.024	-0.030	-0.034
CP7	0.024	0.014	-0.015	-0.027	-0.049	-0.100	-0.128	-0.152	-0.245	-0.317	-0.335	0.025	0.011	-0.014	-0.029
CP8	-0.011	-0.019	-0.039	-0.045	-0.057	-0.097	-0.102	-0.119	-0.294	-0.418	-0.439	-0.010	-0.024	-0.039	-0.049
CP9	-0.006	-0.015	-0.031	-0.036	-0.042	-0.045	-0.072	-0.099	-0.272	-0.346	-0.361	-0.008	-0.017	-0.031	-0.040
CP10	-0.010	-0.014	-0.026	-0.028	-0.035	-0.049	-0.080	-0.113	-0.321	-0.376	-0.395	-0.009	-0.020	-0.027	-0.031
CP11	0.013	0.009	0.001	0.000	-0.006	-0.015	-0.028	-0.040	-0.068	-0.099	-0.107	0.016	0.009	0.003	-0.001
CP12	0.010	0.007	-0.003	-0.003	-0.008	-0.017	-0.031	-0.046	-0.076	-0.118	-0.128	0.012	0.006	-0.001	-0.006
CP13	0.022	0.020	0.010	0.009	0.003	-0.006	-0.025	-0.042	-0.074	-0.116	-0.126	0.025	0.017	0.012	0.008
CP14	0.002	-0.003	-0.013	-0.014	-0.021	-0.027	-0.046	-0.066	-0.095	-0.138	-0.149	0.001	-0.006	-0.014	-0.019
CP16	0.003	-0.001	-0.013	-0.015	-0.023	-0.046	-0.116	-0.167	-0.189	-0.283	-0.305	0.004	-0.002	-0.013	-0.017
CP17	-0.020	-0.024	-0.035	-0.038	-0.045	-0.062	-0.099	-0.130	-0.354	-0.426	-0.446	-0.023	-0.032	-0.039	-0.044
CP18	-0.018	-0.022	-0.035	-0.039	-0.047	-0.059	-0.091	-0.105	-0.228	-0.286	-0.301	-0.020	-0.027	-0.038	-0.043
CP20	-0.004	-0.016	-0.045	-0.057	-0.075	-0.110	-0.137	-0.213	-0.220	-0.281	-0.296	-0.004	-0.019	-0.046	-0.060
CP21	0.012	0.001	-0.028	-0.043	-0.062	-0.111	-0.164	-0.216	-0.226	-0.298	-0.314	0.013	-0.002	-0.028	-0.045
CP22	-0.018	-0.022	-0.035	-0.038	-0.046	-0.063	-0.111	-0.137	-0.292	-0.383	-0.402	-0.020	-0.029	-0.038	-0.043
CP23	0.011	0.005	-0.011	-0.016	-0.023	-0.049	-0.110	-0.131	-0.217	-0.312	-0.331	0.012	0.002	-0.010	-0.017
CP24	-0.010	-0.016	-0.029	-0.032	-0.041	-0.055	-0.074	-0.086	-0.120	-0.153	-0.162	-0.014	-0.022	-0.032	-0.037
CP25	0.010	0.007	-0.005	-0.010	-0.017	-0.032	-0.052	-0.067	-0.108	-0.152	-0.166	0.013	0.005	-0.004	-0.009
CP26	0.004	-0.001	-0.015	-0.019	-0.027	-0.043	-0.068	-0.087	-0.130	-0.183	-0.197	0.005	-0.004	-0.013	-0.018
CP27	0.027	0.024	0.011	0.008	0.001	-0.015	-0.035	-0.052	-0.098	-0.137	-0.148	0.029	0.021	0.014	0.010
CP28	0.000	-0.006	-0.022	-0.025	-0.035	-0.051	-0.075	-0.095	-0.136	-0.184	-0.197	-0.001	-0.011	-0.023	-0.027
CP29	0.012	0.006	-0.011	-0.017	-0.032	-0.066	-0.109	-0.123	-0.151	-0.221	-0.238	0.015	0.005	-0.009	-0.018
CP30	0.001	-0.008	-0.024	-0.030	-0.040	-0.071	-0.148	-0.159	-0.217	-0.305	-0.324	-0.001	-0.012	-0.024	-0.033
CP31	0.003	-0.004	-0.021	-0.028	-0.039	-0.061	-0.121	-0.128	-0.269	-0.357	-0.376	0.002	-0.007	-0.023	-0.030
CP32	-0.017	-0.025	-0.044	-0.050	-0.060	-0.091	-0.143	-0.147	-0.346	-0.439	-0.458	-0.022	-0.034	-0.048	-0.056

Table X. Continued

Orifice Name	Point 199.	Point 200.	Point 201.	Point 202.	Point 203.	Point 204.	Point 205.	Point 206.	Point 207.	Point 208.	Point 209.	Point 210.	Point 211.	Point 212.	Point 213.
CP33	-0.005	-0.016	-0.038	-0.044	-0.057	-0.089	-0.144	-0.161	-0.322	-0.422	-0.445	-0.008	-0.022	-0.040	-0.050
CP34	-0.002	-0.017	-0.057	-0.069	-0.088	-0.113	-0.153	-0.344	-0.320	-0.398	-0.418	-0.005	-0.022	-0.054	-0.069
CP35	-0.011	-0.031	-0.077	-0.094	-0.119	-0.149	-0.169	-0.310	-0.331	-0.407	-0.425	-0.012	-0.037	-0.077	-0.099
CP36	-0.015	-0.042	-0.096	-0.122	-0.154	-0.221	-0.266	-0.270	-0.325	-0.415	-0.438	-0.018	-0.051	-0.100	-0.126
CP37	3.155	3.154	3.152	3.150	3.139	3.135	3.128	3.120	3.118	3.106	3.100	2.803	2.796	2.793	2.786
CP39	-0.023	-0.043	-0.081	-0.100	-0.124	-0.164	-0.231	-0.620	-1.121	-1.317	-1.320	-0.021	-0.047	-0.078	-0.099
CP40	-0.032	-0.050	-0.089	-0.104	-0.125	-0.156	-0.131	-0.190	-0.657	-1.213	-1.277	-0.032	-0.052	-0.088	-0.106
CP41	-0.062	-0.075	-0.103	-0.111	-0.127	-0.151	-0.153	-0.120	-0.070	-0.435	-0.521	-0.064	-0.080	-0.103	-0.115
CP42	-0.017	-0.027	-0.052	-0.058	-0.070	-0.087	-0.087	-0.059	-0.003	-0.087	-0.136	-0.015	-0.029	-0.049	-0.059
CP43	-0.046	-0.053	-0.066	-0.071	-0.082	-0.092	-0.094	-0.088	-0.055	-0.091	-0.109	-0.047	-0.058	-0.068	-0.075
CP44	-0.187	-0.193	-0.186	-0.182	-0.187	-0.189	-0.180	-0.181	-0.194	-0.175	-0.200	-0.201	-0.204	-0.205	-0.205
CP45	-0.057	-0.048	-0.035	-0.026	-0.021	-0.006	0.019	0.029	0.056	0.085	0.088	-0.055	-0.050	-0.035	-0.031
CP46	-0.082	-0.073	-0.059	-0.050	-0.043	-0.028	-0.004	0.008	0.035	0.063	0.068	-0.086	-0.081	-0.066	-0.060
CP47	-0.087	-0.076	-0.061	-0.053	-0.045	-0.028	-0.004	0.009	0.038	0.065	0.070	-0.089	-0.082	-0.067	-0.061
CP48	-0.080	-0.069	-0.054	-0.045	-0.038	-0.018	0.006	0.017	0.047	0.074	0.077	-0.084	-0.079	-0.061	-0.055
CP49	-0.088	-0.077	-0.060	-0.050	-0.044	-0.023	0.004	0.016	0.045	0.072	0.077	-0.097	-0.088	-0.070	-0.063
CP50	-0.101	-0.073	-0.047	-0.036	-0.029	-0.010	0.017	0.030	0.060	0.088	0.092	-0.097	-0.071	-0.046	-0.039
CP51	-0.062	-0.057	-0.042	-0.030	-0.025	-0.006	0.020	0.033	0.062	0.087	0.092	-0.057	-0.056	-0.041	-0.034
CP52	-0.065	-0.059	-0.044	-0.034	-0.029	-0.011	0.014	0.026	0.053	0.078	0.082	-0.059	-0.059	-0.044	-0.038
CP53	-0.054	-0.046	-0.032	-0.025	-0.020	-0.002	0.021	0.034	0.059	0.085	0.088	-0.048	-0.045	-0.032	-0.025
CP54	-0.062	-0.055	-0.041	-0.032	-0.027	-0.011	0.011	0.022	0.049	0.072	0.077	-0.059	-0.055	-0.043	-0.037
CP55	-0.061	-0.052	-0.041	-0.031	-0.027	-0.012	0.010	0.022	0.046	0.069	0.073	-0.061	-0.054	-0.042	-0.037
CP56	-0.052	-0.044	-0.036	-0.029	-0.026	-0.014	0.004	0.013	0.035	0.056	0.060	-0.050	-0.046	-0.037	-0.034
CP57	-0.040	-0.032	-0.023	-0.016	-0.014	-0.002	0.016	0.024	0.046	0.068	0.072	-0.037	-0.033	-0.023	-0.019
CP58	-0.071	-0.064	-0.055	-0.048	-0.046	-0.034	-0.017	-0.010	0.012	0.033	0.037	-0.073	-0.070	-0.061	-0.057
CP60	-0.030	-0.022	-0.015	-0.006	-0.005	0.006	0.022	0.031	0.052	0.073	0.075	-0.023	-0.021	-0.010	-0.007
CP61	-0.038	-0.033	-0.025	-0.019	-0.017	-0.007	0.006	0.015	0.033	0.049	0.051	-0.040	-0.037	-0.027	-0.025
CP62	-0.013	-0.012	-0.012	-0.007	-0.010	-0.007	-0.003	-0.003	0.003	0.007	0.006	-0.018	-0.020	-0.017	-0.017
CP63	0.006	0.007	0.006	0.008	0.006	0.007	0.011	0.010	0.014	0.014	0.012	0.004	0.002	0.004	0.003
CP64	0.017	0.018	0.017	0.020	0.017	0.020	0.022	0.023	0.026	0.025	0.024	0.015	0.013	0.014	0.014
CP65	0.015	0.015	0.012	0.012	0.008	0.007	0.006	0.006	0.006	0.010	0.009	0.012	0.009	0.009	0.006

Table X. Continued

Orifice Name	Point 214.	Point 215.	Point 216.	Point 217.	Point 218.	Point 219.	Point 220.	Point 221.	Point 222.	Point 223.	Point 224.	Point 225.	Point 226.	Point 227.	Point 228.
CP1	-0.015	-0.019	-0.034	-0.048	-0.084	-0.121	-0.126	0.031	0.031	0.020	0.005	-0.011	-0.050	-0.086	-0.118
CP2	-0.066	-0.071	-0.081	-0.094	-0.125	-0.160	-0.169	-0.035	-0.034	-0.039	-0.057	-0.069	-0.104	-0.138	-0.170
CP3	-0.011	-0.022	-0.038	-0.056	-0.091	-0.131	-0.140	0.042	0.037	0.028	0.005	-0.019	-0.055	-0.092	-0.135
CP4	-0.022	-0.042	-0.086	-0.121	-0.141	-0.193	-0.201	0.038	0.035	0.021	-0.023	-0.081	-0.108	-0.143	-0.201
CP5	-0.042	-0.055	-0.088	-0.140	-0.354	-0.476	-0.493	-0.006	-0.008	-0.020	-0.057	-0.113	-0.282	-0.474	-0.571
CP7	-0.053	-0.096	-0.126	-0.159	-0.246	-0.316	-0.327	0.057	0.038	0.003	-0.076	-0.126	-0.270	-0.285	-0.357
CP8	-0.061	-0.099	-0.103	-0.120	-0.281	-0.426	-0.440	0.015	0.002	-0.019	-0.075	-0.084	-0.318	-0.414	-0.490
CP9	-0.045	-0.048	-0.073	-0.105	-0.279	-0.341	-0.354	0.015	0.001	-0.016	-0.032	-0.076	-0.267	-0.316	-0.399
CP10	-0.038	-0.049	-0.079	-0.118	-0.344	-0.390	-0.403	0.009	0.001	-0.010	-0.039	-0.090	-0.344	-0.402	-0.486
CP11	-0.007	-0.013	-0.025	-0.038	-0.065	-0.100	-0.103	0.058	0.051	0.045	0.024	0.011	-0.014	-0.052	-0.072
CP12	-0.011	-0.016	-0.031	-0.044	-0.073	-0.116	-0.123	0.043	0.038	0.032	0.012	-0.005	-0.033	-0.080	-0.114
CP13	0.004	-0.003	-0.022	-0.040	-0.068	-0.113	-0.119	0.072	0.065	0.058	0.039	0.014	-0.001	-0.064	-0.100
CP14	-0.025	-0.030	-0.047	-0.066	-0.094	-0.141	-0.147	0.019	0.013	0.005	-0.014	-0.040	-0.049	-0.119	-0.150
CP16	-0.027	-0.044	-0.108	-0.179	-0.176	-0.274	-0.290	0.033	0.026	0.015	-0.028	-0.145	-0.151	-0.232	-0.316
CP17	-0.052	-0.065	-0.100	-0.149	-0.355	-0.429	-0.445	-0.027	-0.034	-0.046	-0.078	-0.144	-0.412	-0.431	-0.514
CP18	-0.053	-0.062	-0.091	-0.131	-0.232	-0.290	-0.300	-0.009	-0.015	-0.030	-0.057	-0.111	-0.287	-0.287	-0.345
CP20	-0.079	-0.111	-0.142	-0.148	-0.217	-0.286	-0.294	0.013	-0.011	-0.039	-0.100	-0.116	-0.191	-0.271	-0.341
CP21	-0.065	-0.108	-0.166	-0.168	-0.223	-0.301	-0.311	0.038	0.016	-0.021	-0.107	-0.146	-0.182	-0.278	-0.353
CP22	-0.051	-0.065	-0.109	-0.176	-0.284	-0.381	-0.398	-0.017	-0.023	-0.034	-0.073	-0.163	-0.263	-0.373	-0.455
CP23	-0.026	-0.045	-0.100	-0.178	-0.202	-0.303	-0.315	0.042	0.033	0.020	-0.025	-0.138	-0.136	-0.253	-0.328
CP24	-0.044	-0.054	-0.072	-0.084	-0.112	-0.142	-0.146	-0.016	-0.022	-0.033	-0.058	-0.068	-0.094	-0.119	-0.134
CP25	-0.016	-0.026	-0.045	-0.057	-0.091	-0.133	-0.140	0.043	0.039	0.027	0.008	-0.006	-0.034	-0.071	-0.100
CP26	-0.026	-0.039	-0.061	-0.072	-0.115	-0.161	-0.169	0.033	0.027	0.017	-0.009	-0.027	-0.054	-0.102	-0.139
CP27	0.002	-0.008	-0.027	-0.035	-0.082	-0.117	-0.123	0.058	0.057	0.049	0.023	0.013	-0.018	-0.056	-0.077
CP28	-0.036	-0.049	-0.073	-0.079	-0.122	-0.166	-0.173	0.006	-0.003	-0.015	-0.041	-0.054	-0.086	-0.130	-0.158
CP29	-0.032	-0.061	-0.103	-0.114	-0.130	-0.197	-0.207	0.044	0.034	0.018	-0.036	-0.068	-0.061	-0.132	-0.183
CP30	-0.044	-0.067	-0.139	-0.197	-0.194	-0.283	-0.297	0.007	-0.003	-0.017	-0.068	-0.175	-0.137	-0.238	-0.304
CP31	-0.040	-0.059	-0.113	-0.177	-0.247	-0.342	-0.354	0.018	0.007	-0.008	-0.051	-0.146	-0.182	-0.296	-0.365
CP32	-0.068	-0.093	-0.138	-0.191	-0.342	-0.438	-0.450	-0.040	-0.051	-0.069	-0.116	-0.193	-0.359	-0.443	-0.519

Table X. Continued

Orifice Name	Point 214.	Point 215.	Point 216.	Point 217.	Point 218.	Point 219.	Point 220.	Point 221.	Point 222.	Point 223.	Point 224.	Point 225.	Point 226.	Point 227.	Point 228.
CP33	-0.061	-0.087	-0.139	-0.172	-0.316	-0.418	-0.435	-0.009	-0.026	-0.045	-0.096	-0.164	-0.382	-0.418	-0.512
CP34	-0.087	-0.108	-0.148	-0.162	-0.307	-0.385	-0.399	0.008	-0.014	-0.042	-0.095	-0.136	-0.281	-0.346	-0.431
CP35	-0.123	-0.147	-0.168	-0.225	-0.320	-0.392	-0.404	-0.011	-0.047	-0.091	-0.152	-0.151	-0.290	-0.362	-0.444
CP36	-0.163	-0.218	-0.265	-0.287	-0.312	-0.400	-0.418	-0.034	-0.082	-0.135	-0.235	-0.289	-0.293	-0.385	-0.483
CP37	2.779	2.773	2.769	2.757	2.758	2.747	2.747	-2.806	-2.795	-2.784	-2.782	-2.768	-2.791	-2.776	-2.754
CP39	-0.125	-0.158	-0.133	-0.529	-1.091	-1.538	-1.549	-0.013	-0.051	-0.084	-0.143	-0.406	-0.816	-1.612	-1.725
CP40	-0.126	-0.152	-0.147	-0.142	-0.377	-0.929	-1.010	-0.030	-0.057	-0.095	-0.147	-0.105	-0.166	-0.441	-0.939
CP41	-0.131	-0.150	-0.161	-0.127	-0.062	-0.248	-0.329	-0.068	-0.090	-0.112	-0.161	-0.127	-0.080	-0.142	-0.378
CP42	-0.070	-0.085	-0.091	-0.065	-0.014	-0.058	-0.071	0.007	-0.011	-0.032	-0.064	-0.040	-0.003	-0.017	-0.124
CP43	-0.085	-0.094	-0.100	-0.095	-0.064	-0.093	-0.097	-0.043	-0.054	-0.065	-0.097	-0.085	-0.064	-0.079	-0.120
CP44	-0.193	-0.209	-0.214	-0.211	-0.209	-0.198	-0.196	-0.199	-0.198	-0.205	-0.185	-0.175	-0.185	-0.201	-0.177
CP45	-0.025	-0.009	0.011	0.022	0.049	0.071	0.078	-0.034	-0.016	-0.003	0.014	0.045	0.062	0.086	0.117
CP46	-0.053	-0.038	-0.016	-0.006	0.020	0.044	0.050	-0.106	-0.090	-0.078	-0.058	-0.029	-0.009	0.012	0.047
CP47	-0.053	-0.036	-0.013	-0.003	0.025	0.048	0.055	-0.091	-0.074	-0.061	-0.037	-0.007	0.013	0.034	0.068
CP48	-0.047	-0.030	-0.006	0.005	0.030	0.054	0.059	-0.105	-0.086	-0.075	-0.049	-0.018	-0.002	0.021	0.055
CP49	-0.054	-0.037	-0.011	-0.001	0.027	0.051	0.057	-0.131	-0.111	-0.100	-0.071	-0.038	-0.018	0.002	0.036
CP50	-0.030	-0.014	0.013	0.025	0.051	0.075	0.081	-0.069	-0.027	-0.013	0.013	0.045	0.064	0.083	0.115
CP51	-0.025	-0.009	0.015	0.027	0.053	0.076	0.081	-0.030	-0.023	-0.008	0.019	0.049	0.068	0.087	0.116
CP52	-0.031	-0.012	0.009	0.020	0.045	0.065	0.071	-0.039	-0.025	-0.012	0.012	0.040	0.059	0.075	0.108
CP53	-0.019	-0.003	0.017	0.029	0.052	0.073	0.078	-0.025	-0.008	0.000	0.022	0.051	0.066	0.087	0.113
CP54	-0.030	-0.015	0.005	0.016	0.039	0.059	0.065	-0.049	-0.034	-0.022	-0.004	0.023	0.040	0.056	0.084
CP55	-0.031	-0.016	0.004	0.014	0.037	0.055	0.061	-0.049	-0.033	-0.023	-0.006	0.022	0.038	0.054	0.080
CP56	-0.029	-0.017	-0.002	0.006	0.025	0.043	0.048	-0.037	-0.022	-0.018	-0.004	0.019	0.032	0.046	0.074
CP57	-0.015	-0.004	0.012	0.019	0.042	0.057	0.063	-0.006	0.005	0.011	0.023	0.050	0.064	0.076	0.102
CP58	-0.052	-0.041	-0.027	-0.021	0.000	0.016	0.022	-0.084	-0.074	-0.066	-0.052	-0.030	-0.021	-0.006	0.019
CP60	-0.004	0.007	0.022	0.030	0.049	0.065	0.070	0.028	0.042	0.047	0.061	0.081	0.098	0.110	0.135
CP61	-0.023	-0.013	0.001	0.007	0.024	0.037	0.041	-0.039	-0.027	-0.022	-0.013	0.007	0.017	0.029	0.050
CP62	-0.018	-0.014	-0.010	-0.010	-0.003	-0.002	-0.001	-0.022	-0.015	-0.015	-0.015	-0.006	-0.006	-0.003	0.011
CP63	0.002	0.005	0.006	0.005	0.010	0.009	0.010	0.031	0.035	0.035	0.033	0.040	0.040	0.038	0.051
CP64	0.013	0.015	0.018	0.017	0.024	0.021	0.021	0.031	0.037	0.033	0.034	0.039	0.041	0.040	0.054
CP65	0.004	0.004	0.002	-0.001	0.002	0.002	0.004	0.032	0.033	0.030	0.024	0.029	0.023	0.024	0.039

Table X. Continued

Orifice Name	Point 229.	Point 230.	Point 231.	Point 232.
CP1	-0.162	-0.200	-0.246	-0.286
CP2	-0.222	-0.268	-0.339	-0.396
CP3	-0.195	-0.246	-0.312	-0.369
CP4	-0.281	-0.353	-0.445	-0.517
CP5	-0.686	-0.797	-0.927	-1.048
CP7	-0.453	-0.540	-0.646	-0.755
CP8	-0.588	-0.678	-0.789	-0.893
CP9	-0.478	-0.557	-0.651	-0.737
CP10	-0.556	-0.648	-0.758	-0.873
CP11	-0.110	-0.137	-0.174	-0.204
CP12	-0.169	-0.223	-0.290	-0.349
CP13	-0.152	-0.199	-0.261	-0.314
CP14	-0.202	-0.240	-0.294	-0.336
CP16	-0.416	-0.505	-0.611	-0.709
CP17	-0.621	-0.718	-0.844	-0.963
CP18	-0.440	-0.523	-0.631	-0.731
CP20	-0.434	-0.516	-0.623	-0.712
CP21	-0.424	-0.494	-0.590	-0.681
CP22	-0.559	-0.653	-0.767	-0.869
CP23	-0.421	-0.499	-0.590	-0.669
CP24	-0.161	-0.178	-0.203	-0.220
CP25	-0.148	-0.186	-0.243	-0.288
CP26	-0.183	-0.221	-0.264	-0.299
CP27	-0.109	-0.140	-0.184	-0.227
CP28	-0.196	-0.229	-0.268	-0.291
CP29	-0.233	-0.283	-0.342	-0.391
CP30	-0.375	-0.436	-0.511	-0.575
CP31	-0.442	-0.508	-0.586	-0.657
CP32	-0.606	-0.689	-0.790	-0.876

Table X. Concluded

Orifice Name	Point 229.	Point 230.	Point 231.	Point 232.
CP33	-0.612	-0.712	-0.838	-0.953
CP34	-0.531	-0.628	-0.749	-0.864
CP35	-0.540	-0.625	-0.730	-0.826
CP36	-0.592	-0.694	-0.810	-0.912
CP37	-2.755	-2.753	-2.734	-2.726
CP39	-1.630	-1.483	-1.343	-1.217
CP40	-1.159	-1.235	-1.217	-1.142
CP41	-0.639	-0.844	-0.973	-0.990
CP42	-0.311	-0.518	-0.671	-0.754
CP43	-0.255	-0.428	-0.604	-0.721
CP44	-0.170	-0.154	-0.147	-0.135
CP45	0.141	0.169	0.195	0.225
CP46	0.065	0.094	0.122	0.151
CP47	0.089	0.119	0.143	0.172
CP48	0.071	0.101	0.124	0.151
CP49	0.052	0.082	0.102	0.129
CP50	0.130	0.157	0.175	0.196
CP51	0.131	0.154	0.172	0.196
CP52	0.122	0.145	0.162	0.184
CP53	0.129	0.152	0.170	0.192
CP54	0.099	0.121	0.139	0.164
CP55	0.095	0.117	0.133	0.153
CP56	0.088	0.110	0.130	0.157
CP57	0.119	0.142	0.164	0.186
CP58	0.035	0.057	0.076	0.100
CP60	0.150	0.174	0.196	0.216
CP61	0.062	0.077	0.091	0.112
CP62	0.014	0.024	0.031	0.044
CP63	0.052	0.063	0.068	0.076
CP64	0.054	0.062	0.064	0.075
CP65	0.048	0.061	0.074	0.093

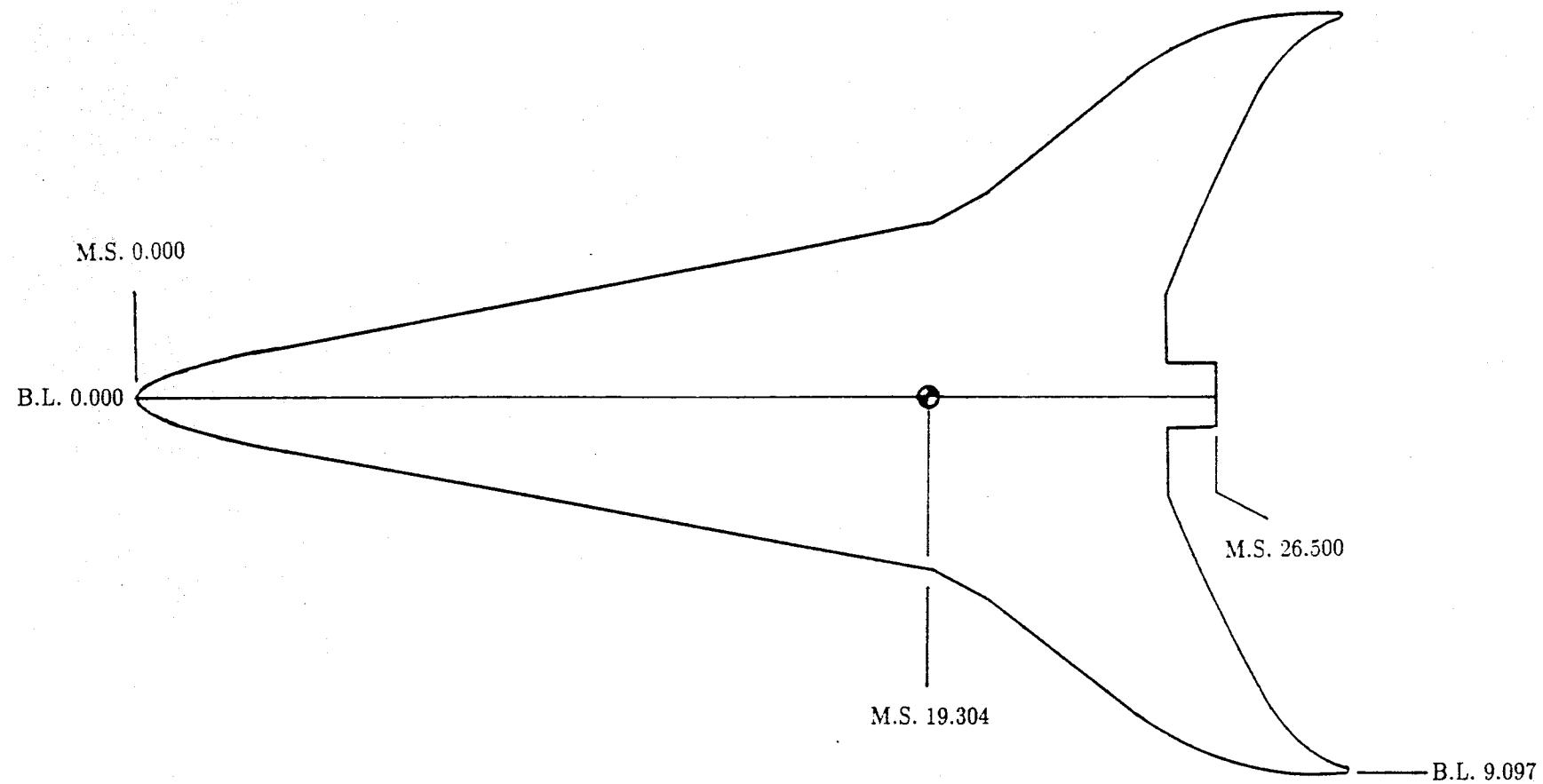
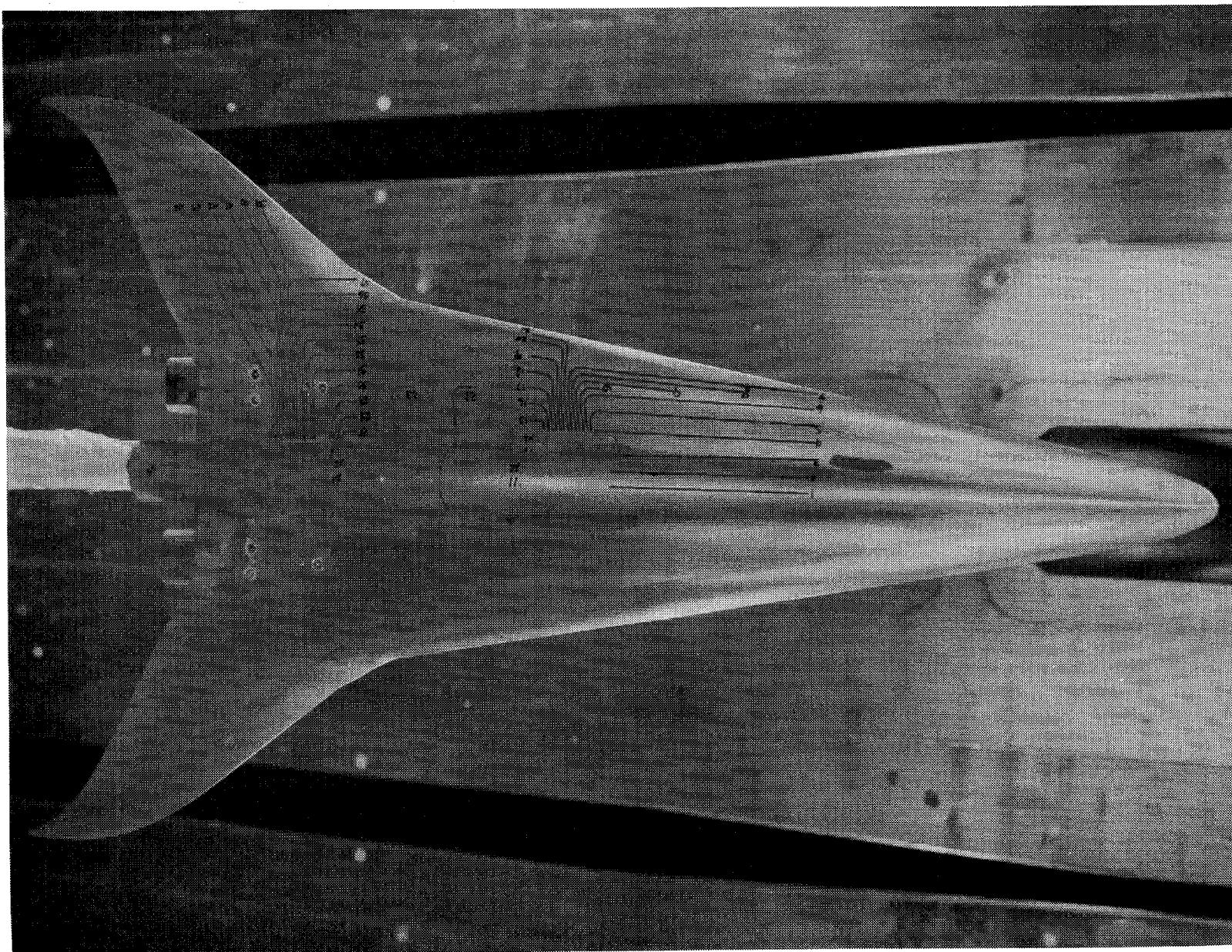


Figure 1.- Curved wing tip model.

Figure 2. Curved wing tip model installed in Langley 8-Foot Transonic Pressure Tunnel.



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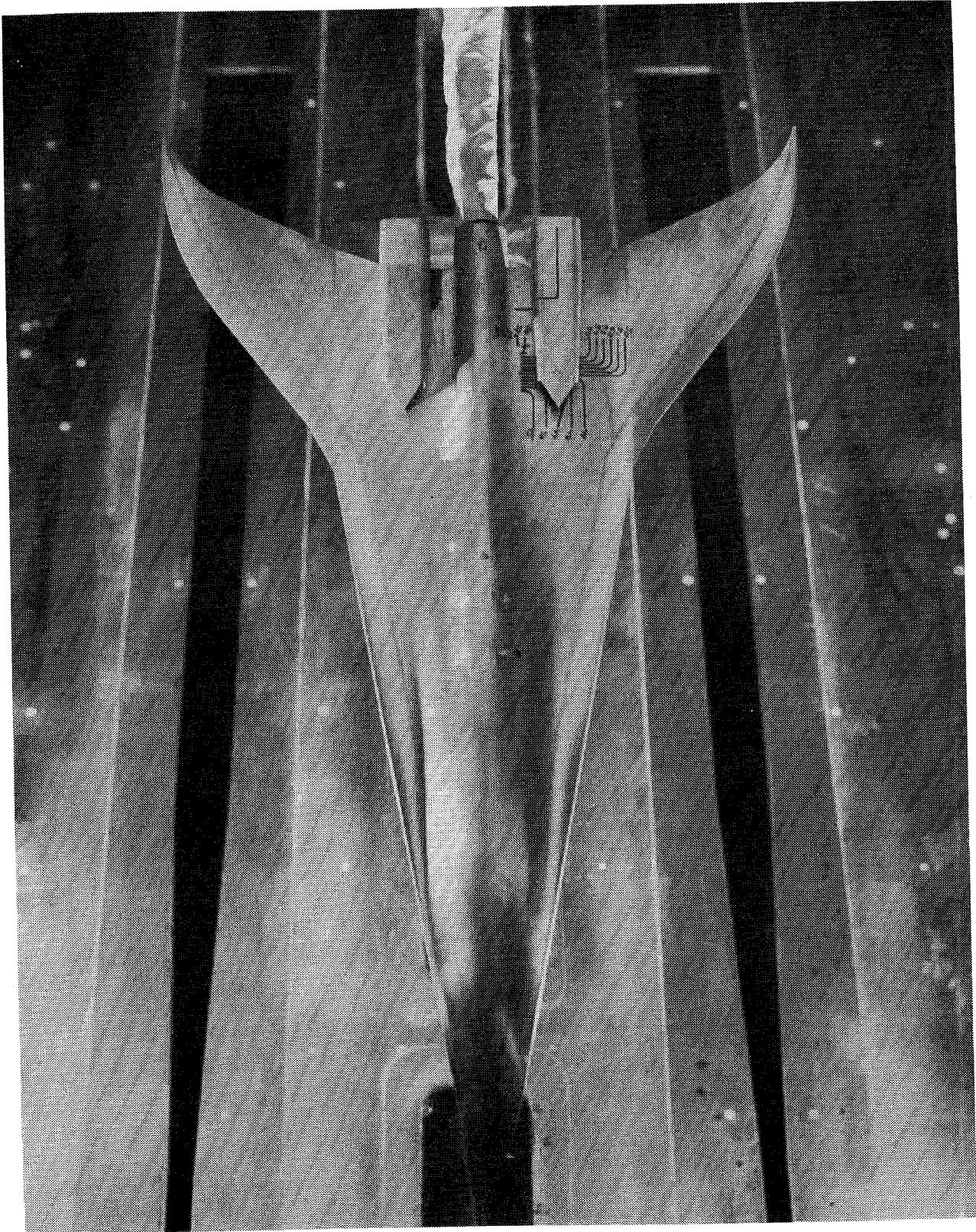


Figure 3.- Curved wing tip model, inverted, in Langley 8-Foot Transonic Pressure Tunnel.

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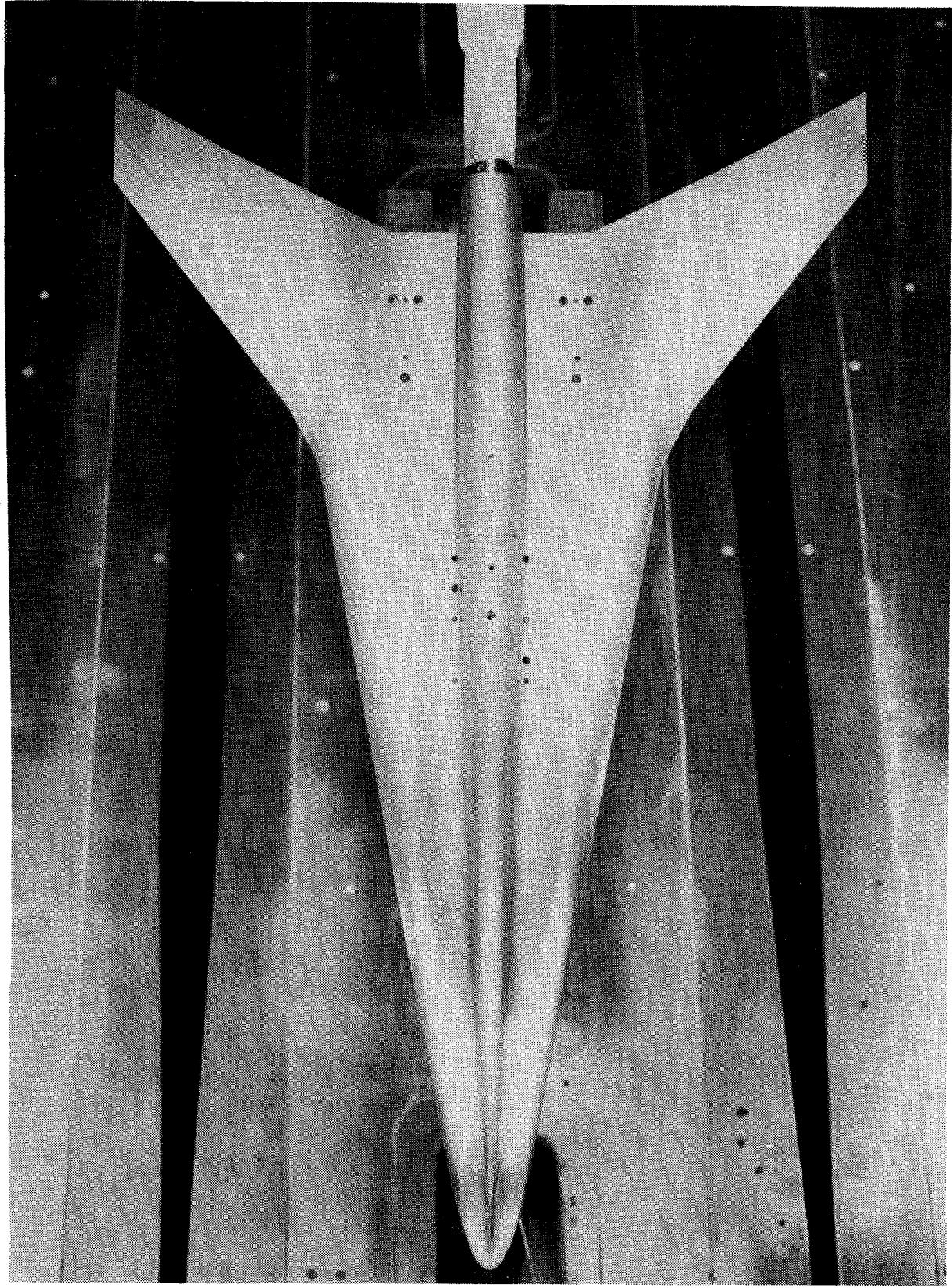


Figure 4.- Straight wing tip model in Langley 8-Foot Transonic Pressure Tunnel.

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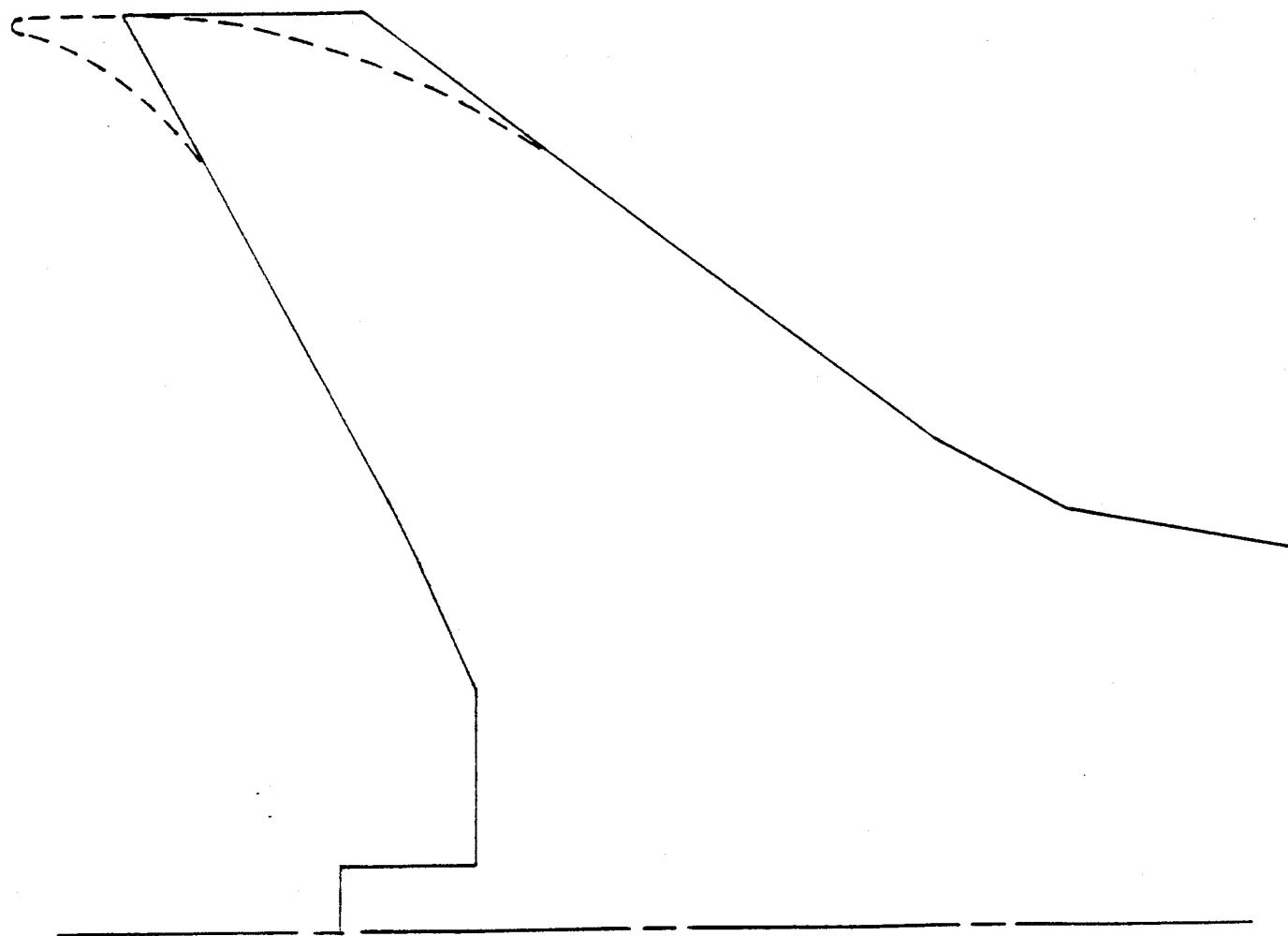


Figure 5.- Comparison of curved and straight wing tips.

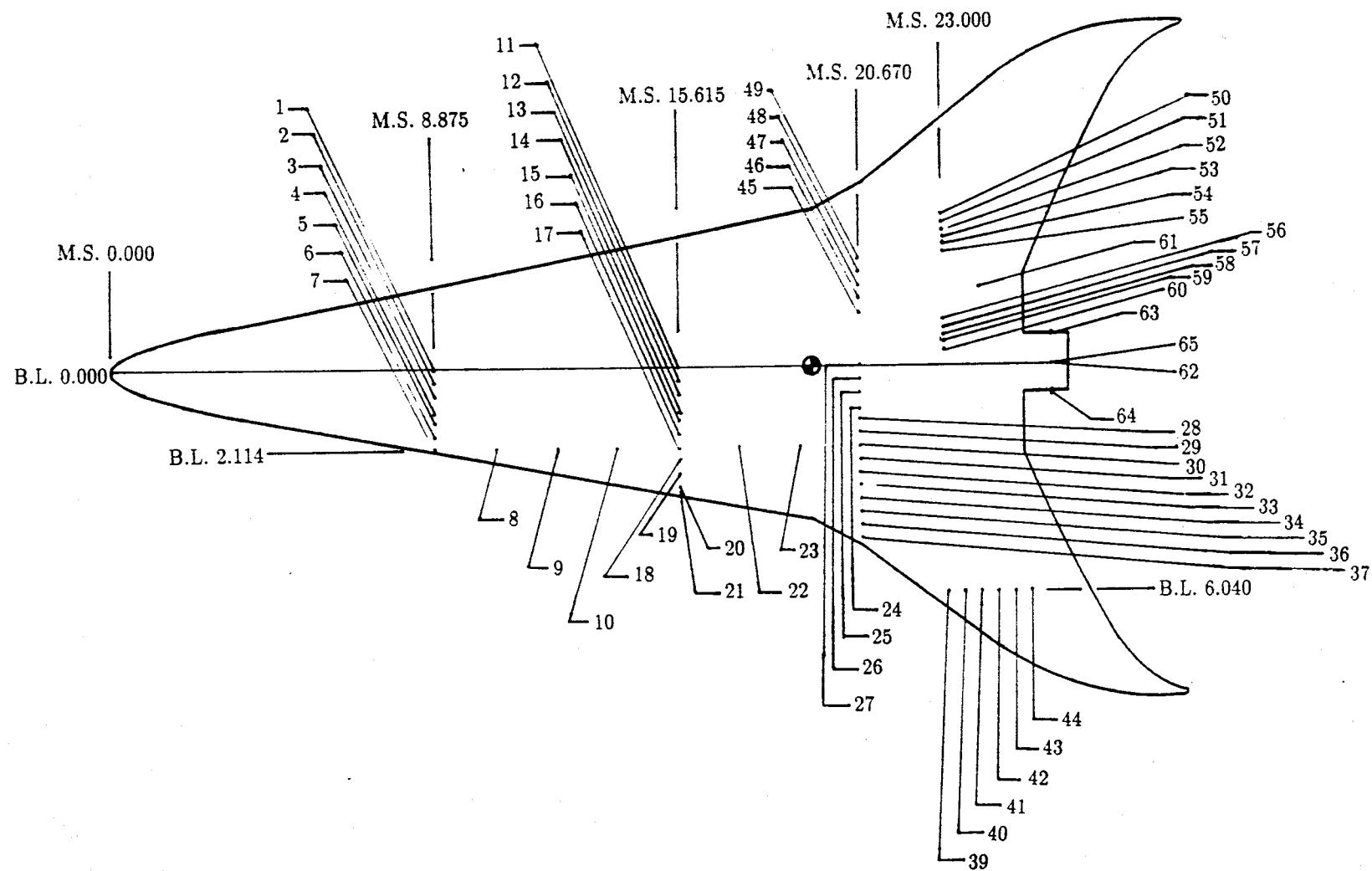


Figure 6.- Pressure orifice arrangement for the curved wing tip model.

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<p>An experimental study of a generic high-speed civil transport has been conducted in NASA Langley's 8-Foot Transonic Pressure Tunnel. The data base was obtained for the purpose of assessing the accuracy of various levels of computational analysis. Two models differing only in wing tip geometry were tested with and without flow-through nacelles. The baseline model has a curved or crescent wing tip shape while the second model has a more conventional straight wing tip shape. The study was conducted at Mach numbers from 0.30 to 1.19. Force data were obtained on both the straight and curved wing tip models. Only the curved wing tip model was instrumented for measuring pressures. Longitudinal and lateral-directional aerodynamic data are presented without analysis in tabulated form. Pressure coefficients for the curved wing tip model are also presented in tabulated form.</p>			
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